

AMERICAN  
RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

SATURDAY, JULY 30, 1859.

Second Quarto Series, Vol. XV., No. 31.—Whole No. 1,215, Vol. XXXII.

ESTABLISHED IN 1831.

NEW-YORK:

PUBLISHED WEEKLY, BY

JOHN H. SCHULTZ & CO.

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Messrs. ALGAR & STREET, No. 11 Clements Lane, Lombard Street, London, are the authorised European Agents for the Journal.

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## American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, July 30, 1859.

### Traffic of the Pittsburg, Fort Wayne and Chicago Railroad.

There were transported over this road during the year ending December 31, 1858, 255,663 tons of freight, the revenue from which amounted to \$668,928 66. Of this amount of tonnage, there were transported eastward 143,572 tons, which yielded a revenue of \$343,777 49, of which 60,720 tons, yielding a revenue of \$132,656 69, was freight local to the road, and 82,852 tons, yielding a revenue of \$211,120 80, was through freight, emanating either from, or destined to points off the line of this road. The amount of freight transported westward was 142,091 tons, which yielded a revenue of \$323,151 17—of which 61,096 tons, yielding a revenue of \$78,270 91, was local freight, and 80,995 tons, yielding a revenue of \$246,880 26, was through freight. Therefore, 366 tons more of local freight were moved westward than eastward, and 1,857 tons more through freight moved eastward than westward. Of the total tonnage, 1,481 tons more were moved eastward than westward.

Of the revenue from local freight, though 376 tons more were removed westward than eastward, the revenue from the eastward tonnage was \$54,385 78 more than that from the westward tonnage; the tons moved one mile in the one case being 5,477,577, and in the other, 3,727,280—showing a difference of 1,750,297 tons moved one mile in favor of the westward freight.

Of the revenue from through freight, while the excess in the tonnage was in favor of the eastward freight, by 1,857 tons, the revenue yielded was \$35,759 46 more from the westward than the eastward tonnage, the tons moved one mile westward being 13,218,724, and eastward 12,744,762—showing a difference of 473,962 tons moved one mile in favor of the westward freight.

Of the whole revenue from both kinds of freight, \$20,626 32 more was received from the eastward than from the westward freight, while the tonnage was also 1,481 tons greater, and the tons carried one mile exceeded those moved westward 1,276,315.

The average revenue per ton per mile from the eastward local freight, was 02½ cents, and from the same kind of freight westward, 02 1-10th cents per ton per mile; from the eastward through freight, 01 1-10th cents per ton per mile, and from the westward through freight, 01½ cents per ton per mile; the revenue from the whole eastward freight being 01½ cents per ton per mile, from the whole westward freight a fraction less than 02 cents per ton per mile, and for the total tonnage, both eastward and westward, 01½ cents per ton per mile.

Assuming the cost of moving this freight to have been one-half the gross expenses of operating and maintaining the road, (and it is believed the estimate is nearly correct, or sufficiently so for the purpose of comparison,) it will amount to \$465,946 85, or 0½ cent per ton per mile, leaving a profit to the company of \$202,981 81 on this branch of its business, or a fraction less than 6-10 cent per ton per mile.

The whole amount of tonnage transported during the year, compared with 1857, shows a decrease of 19,106 tons, although the revenue derived is increased \$11,242 59, exclusive of the earnings from express freight; the tons moved one mile being for 1858, 35,168,323, and for 1857, 28,893,960, showing an increase of 6,274,363 in the amount of tonnage moved one mile, the result fully demonstrating, that while a less amount of freight was transported during the past year than in 1857, the revenue produced was greater, in consequence of this less amount of freight, having been moved such a greater distance as more than equalled the loss in the tonnage.

Had there been, therefore, no decrease in the tonnage, and the revenue per ton remained the same, the earnings from freight would have been \$75,000 00 more than they now appear, or \$743,600 00.

There were transported over the road during the year, 439,040 passengers, the revenue from which amounted to \$741,222 77. Of this number, there were transported eastward 215,456, which produced a revenue of \$360,608 80, 174,549 of these, yielding a revenue of \$169,024 55, being local to the

line, and 40,907, yielding a revenue of \$191,584 25, were from, or destined to, points foreign to this road.

The number of passengers transported westward was 223,584, which produced a revenue of \$380,613 97. Of this number, 174,367, yielding a revenue of \$178,032 35, were local, and 49,217, yielding a revenue of \$202,581 62, were through passengers. There were, therefore, but 182 more local passengers transported eastward than westward, and 8,310 more through passengers transported westward than eastward, while of the total number, 8,128 more were transported westward than eastward.

Of the revenue from local passengers, while there were 182 more transported eastward than westward, the revenue from the westward passengers was \$9,007 80 more than that from the passengers traveling eastward; the number carried one mile being in the one case 5,869,768, and in the other 6,230,146, showing a difference of 360,378 more miles traveled by the westward than eastward passengers.

Of the revenue from through passengers, \$10,997 37 more were derived from those going westward than eastward, in part attributable to an increase of 8,310 in this class, but more especially to the fact, that the westward passengers traveled 1,288,777 more miles than those transported eastward.

Of the total revenue from passengers, \$20,005 17 more were received from the westward than the eastward passengers, while the number was 8,128 greater, and the number transported one mile exceeded those going eastward 1,649,155, showing not only that the preponderance of travel was westward, but that this larger number were transported comparatively a longer distance than those traveling eastward.

The average revenue from local passengers per mile traveled eastward was 02½ cents, and westward 02½ cents; from the through passengers eastward 02 4-10ths cents per mile traveled, and westward 02 2-10 cents; the revenue from the whole number of passengers going eastward being 02 6-10 cents per mile traveled, and westward 02½ cents, and for the whole number of passengers eastward and westward a fraction over 02½ cents per mile traveled.

Assuming, as in the case of the tonnage, that it cost one-half the gross expenses of operating and maintaining the road, or \$465,946 85 to transport these passengers, the result shows the cost per mile traveled to have been 01 6-10 cents, and the profit to the company \$275,375 92, or a trifle less than 01 cent per mile traveled.

A comparison of the passenger traffic of the past year with that of 1857, shows a decrease of 89,228 in the number of passengers transported; a decrease of 9,238,658 in the number carried one

mile, and a decrease of \$198,107 98 (exclusive of the sum received on account of extra baggage), in the amount of revenue produced.

This large decrease in the passenger revenue, which *prima facie* would appear to be wholly the result of the decrease in the number of passengers transported, is truly in part attributable to the decrease in the average number of miles traveled by each passenger; for while in 1857 each passenger transported averaged a distance of seventy miles, those transported during 1858 averaged but sixty-six and two-thirds miles.

Viewing it as a whole, the business of the road for the past year compare favorably with that of 1857, while the restoration of business during the present year to somewhat more of its original vigor, together with the conducive effect which the completion of the road to Chicago will exert upon its revenue, will doubtless exhibit a satisfactory result to the shareholders at the close of 1859.

#### Green River Bridge.

This bridge is 984 feet long from abutment to abutment, and 115 feet high above the low water mark. It is divided into five spans, the two spans at the extremes being 180 feet long, and the three intervening 208 feet each from centre to centre of piers. The superstructure is entirely of cast iron, composed of two chords and joists supported by stone piers, and suspended between them by wrought iron suspensions. The system of suspension is under the bridge and composed of different sizes of iron. The main suspension, going from pier to pier, is composed of bars 4 inches by 1½ inches. The second suspension, going from each pier to the centre post, is composed of bars 4½ inches by 1 inch. The third suspension, going from the centre post to half-way from the pier and then to the pier, is composed of bars 2 inches by ¾ inch; and the fourth suspension is composed of bars 2 inches by ¾ inch. Above the superstructure, the floor-beams are fixed to receive the cross ties and rails. On each side of this track is a small side walk. This substantial bridge was designed by Albert Fink Esq., and made by Inman & Gault, of this city. It is like the bridge over the Monongahela, over which the trains of the Baltimore and Ohio road run daily at the rate of 40 miles per hour. With the exception of the Victoria bridge at Montreal, it is the longest structure of the kind in America, and we hesitate not to say that it will compare favorably with anything of the kind in the world for beauty and durability. The cars have gone over it a number of times, and its strength has been fully tested by heavy locomotives moving at a rapid rate.—*Louisville Courier*.

#### Chicago, Burlington and Quincy Railroad.

We have received the report of this company for the fiscal year ending April 30th, 1859. It is very full, and embraces, in addition to the report of the president and directors, statements from the superintendent, treasurer, freight agent, ticket agent, baggage agent, and purchasing agent and storekeeper—thus giving in detail the operations and business of the road for the year.

The road and appurtenances owned and occupied by the company, are as follows:

That part of the Galena and Chicago Union Railroad from Chicago to the Junction is occupied for the passage of our trains and business under a lease from that company, being in length ..... 80 miles.  
The road of this company now built commences at the Junction and extends to Galesburg, a distance of .... 138 "  
The Peoria and Oquawka railroad from Galesburg to Burlington is operated under a lease from that company, and is in length ..... 42 "

Making a total length of line from Chicago to Burlington ..... 210 "

This company owns about twelve acres of depot grounds in the city of Chicago on the South Branch

of the Chicago river; also, one-fourth interest in the Union track, which connects the several railroads in Chicago, with some valuable lands, (necessarily purchased in securing lands for that track,) which are in part used for depot purposes by the several owners thereof. The passenger and a portion of the freight business, at Chicago, is transacted at the depot of the Illinois Central Railroad Company, under a lease or an agreement with that company.

This company own large and ample depot grounds and the necessary station buildings, at East Burlington, which are used for the business of the line.

The aggregate amount charged as cost of road, equipment and appendages remains the same as at the date of the Annual Report of last year, and is as follows:

For construction .....	\$5,799,882 24
" equipment .....	1,400,871 86
" depot and grounds at East Burlington .....	33,362 71
" depot grounds at Chicago .....	201,260 20
Union track at Chicago .....	33,548 91

Total .....

The amount of advances to Peoria and Oquawka R. R. Co. including bonds purchased under the agreement with that Co., is, \$184,158 49

Bonds of the Northern Cross, (now Quincy & Chicago) R. R. Co., purchased to facilitate the completion of said road, under agreement of January 1, 1855 .. 100,000 00

Bonds of the same Co. purchased the past year under same agreement, with subsequent stipulations with the Trustees .. 89,000 00  
Quincy & Chicago R. R. Co.'s Bonds received for balance of old account, on settlement. 7,000 00

680,158 49

Total amount of construction acc'ts, including advances to other roads, \$8,149,084 41

The capital stock of the company remains the same as at the date of the last report, \$4,631,540  
Less 22 shares reported as held by the Company ..... 2,200

Total stock .....

The Funded Debt, May 1, 1859, was as follows:

Chicago & Aurora 1st mortg. 7 per cent. bonds, payable July 1, 1867, \$405,000  
Chicago & Aurora 2d mortg. 7 per cent. bonds, payable Oct. 1, 1869 ..... \$303,000  
Less bonds canceled by sinking fund ... 138,000

165,000

Centr. Military Tract 1st mortgage 7 per cent. bonds, payable July 1, 1864 ..... 400,000  
Do. 2d mortgage 8 per cent. bonds, payable May 1, 1868 281,000  
Do. 8 per cent. bonds of April 1, 1854, payable April 1, '68, 17,000  
Do. 8 per cent. bonds of March 1, 1856, payable March 1, '76, 62,000  
Chicago, Burlington & Quincy, 8 per cent. Consolidated bonds, payable January 1, 1883 ..... \$1,690,000  
Less bonds canceled by sinking fund .. 30,000

1,660,000

Total bonds .....

Total stock and bonds .....

The funded debt has been reduced the past year, by the purchase and canceling of bonds for the sinking fund, to the amount of \$63,000. And, in the aggregate, to the present time, it has been reduced \$168,000. The preceding statements show an excess of investments for construction account and for advances for connecting roads, over capital stock and funded debt, amounting to \$529,744 41.

The income for the year ending April 30th, 1859, embracing earnings on 138 miles of road owned by the company, and our portion of earnings upon the 30 miles of road leased of the Galena and Chicago Union Railroad Company, has been—

For transportation of freight .....	\$689,737 53
" " " passengers .....	333,391 47
" " " mails & miscel. ....	21,444 63

Total earnings .....

Balance to credit of interest and exchange account .....

Total income .....

The expenditures chargeable to Income Account, for the same time, have been, for—

Operating expenses ....	\$541,005 76
Interest on bonds .....	230,382 58
Taxes .....	21,312 02
Transfer office expenses .....	600 00
Rent of Peoria & Oquawka road, for 6 months ending April 30, 1858, unadjusted at date of last report .....	22,500 00
Excess of rent and operating expenses over earnings on Peoria & Oquawka road, for 12 months .....	28,380 87
Rent of Illinois Central depot .....	28,777 46
	872,958 70

Balance of income for fiscal year ....

Add balance of May 1, 1858 .....

Total to May 1, 1859 .....

Deducting from the above the amount charged to Improvement account, the past year .....

Leaves an actual surplus of .....

If from this balance be taken the amount paid for 168 sinking fund bonds, purchased and canceled up to May 1, 1859, at a cost of .....

There will remain a net surplus of .....

The Treasurer's report shows that the amount of bills and accounts receivable, including the amount due from agents and connecting roads, is ..... \$103,009 65  
The deposits in New York and Boston, and cash in the Treasury, are .... 84,062 12

Total of Cash Assets .....

The value of materials on hand for the use of the operating department, is 141,366 16  
Cost of boats for ferries at Burlington and Quincy .....

Total Assets .....

The amount of bills payable on the 1st of May, was ..... \$296,459 64  
Unclaimed dividends, accounts, and pay-rolls .. 13,908 12  
Due agents and connecting roads .....

Total Liabilities .....

Balance of Assets .....

The expenditures for Improvement account the past year, although such as are usually charged



to construction account, have been made a charge upon Income account, believing that thereby the interest of stockholders will be better subserved than by increasing the capital account for such purposes. The following statement will show some of the reasons for, and the cost of the several expenditures charged to that account:

In the spring of 1857 it was supposed that an additional number of locomotive engines would be required in order to the accommodation of the business of the road the ensuing autumn, and, to provide for such business, an agreement was made with the Detroit Locomotive Works for the manufacture and delivery of four coal burning locomotives, at a specified date. That company failed to complete and deliver them at the time agreed upon. When subsequently completed and offered to this company, their use not then being required, we refused to receive them. Upon a full investigation, however, of the subject, during the past year, there appeared equities in the case that demanded a compromise, and it was accordingly decided to receive them at a reduced price agreed upon, and they were purchased for \$38,000.

A large amount of expense has annually been incurred in maintaining that part of the track between Mendota and Galesburg, a distance of eighty miles, for the reason that no material suitable for ballasting had been found in quantities sufficiently large near the line of the road to be available, and very little of that kind of work had been done. A gravel bed was discovered last fall near the line, about mid-way of this section of the road, which has been purchased, and from which a considerable portion of the track has been ballasted, and the remainder is now being done. The amount expended for this purpose has been \$19,559 94.

The engine house at Aurora has been extended, so as to accommodate eight more engines, at a cost of \$5,672 97.

Two passenger cars have been altered and fitted up for sleeping cars. Some improvements have been made in the passenger house at Galesburg, which, with some other small improvements, amount to \$5,092 35.

This company, with other owners in interest of the Union Track, in Chicago, together with the Michigan Southern and Northern Indiana Railroad company, have purchased the lands necessary to make a permanent business connection with that road where the Union Track crosses it. The amount that it will be necessary for this company to contribute (after disposing of some of the lands necessarily bought, but not required for the tracks), will be about three thousand dollars; eighteen hundred of which has been paid and charged to Union Track account.

The revenue of the company has been much less the past year than the Directors had expected, or could have anticipated. The causes that have produced these results are too well understood to require particular notice. It will be sufficient to say that the section of country traversed by your line of road, and that tributary to it, has suffered quite as severely the past two years from the failure of the staple articles of production as any other portion of this or the adjoining States. The earnings of this, compared with last year, show a falling off of thirty per cent. Twenty-four per cent. of this is on freight, and six per cent. on passenger earnings. The falling off of freight earnings was comparatively greater than those of passengers, being thirty-six per cent. on the former, and twenty-three per cent. on the latter. In the item of wheat and flour the falling off has been forty-five per cent., or equal to one million six hundred and fifty-six thousand bushels—in that of corn it has been twenty-eight per cent., or five hundred and seventy-seven thousand bushels. The amount of lumber transported was about one-half as much as that of the previous year, being a reduction of thirty-five millions of feet.

The preceding statements will show satisfactory reasons for the diminished earnings of the past year. Any one acquainted with the fertility of the country tributary to our line of road, and the vast business that must pass over it in years of or-

dinary production and progress, will know that the present depression in the business and earnings of the road can only be transitory, and that a moderate return of prosperity to the country tributary to it, must show again its large productiveness to the stockholders.

Efforts have been made the past year to reduce the expenses of operating the road comparatively with the falling off of receipts, but it has been found impracticable to entirely accomplish this result. The heavy rains of the early summer increased materially the cost of keeping the road in order for several months, and added much to the cost of equipment repairs. That part of the road thus affected has since been graveled, and will not be subject to like expenditures in the future. The operating expenses the past year have been fifty-one and seventy-nine one hundredths per cent., while those of the previous year were forty-six and thirteen one-hundredths per cent. An increased per centage of expenses must necessarily accompany any large falling off in earnings on all well-managed roads. The road and equipment has been kept in good repair and condition, and, with the improvements made the past year, is now more valuable, and in better condition to accommodate a large traffic than at any former period.

The accounts kept the past year of the performance of wood and coal burning locomotives engines, and the fuel consumed, show a saving in expense for fuel in favor of the coal burning engines, of about forty-seven per cent. By examining the accompanying statistics it will be seen that the average cost per mile run of freight engines, using wood for fuel, was nineteen and seven one-hundredths cents per mile; while the cost of running engines with coal for the same service, was ten and sixteen one-hundredths cents, showing a total saving in expense for fuel on 303,496 miles run by freight engines, with coal, of \$27,039 08. From this there is some deduction, probably, to be made for the increased cost of repairs on coal engines, the amount of which has not been fully determined.

Besides the four coal burning engines purchased the past year, six have been changed in re-building from wood to coal, making, with those previously in use, twenty-five exclusively coal burning engines now in service.

Two way freight and conductors' cars have been added; two coal cars have been changed to platform freight, and one baggage car has been exchanged for two platform cars. The equipment of locomotive engines and cars is as follows:

- 62 locomotive engines.
- 27 first class passenger cars.
- 4 second class passenger cars.
- 9 baggage, mail and express cars.
- 761 house freight cars.
- 19 way freight and conductors' cars.
- 125 platform freight cars.
- 38 coal freight cars.
- 38 hand cars.

In order to the proper transaction of our ferry business, at Burlington, it became necessary to provide a ferry boat of our own, or have one that could be put in the service on short notice; accordingly a suitable boat was purchased for this business. Subsequently, satisfactory arrangements were made with the ferry company for doing the ferrying of the line at that place for another year.

Efforts were made to charter a suitable boat, at a fair rate, to transact the business of our line between Quincy and Hannibal, in connection with the Hannibal and St. Joseph Railroad, on the opening of that road for business, but without success. It then became necessary for our company to purchase a boat and place in that service in order to secure the benefits of a proper connection with that road. The Burlington ferry boat was used in that trade until a more suitable boat was obtained, and its use has been continued, as occasion required, in the freighting business of the line. These boats cost about ten thousand dollars each, or, in the aggregate, \$20,479.32. Satisfactory arrangements have been made with the other

parties composing portions of the line, that will insure fair returns upon the investment.

The negotiations in progress at the time of making the last annual report, for the purchase of that part of the Peoria and Oquawka Railroad west of Galesburg, have not resulted in the purchase of that road, for the reason that the parties in interest could not make a good and sufficient title to the property. This company have continued to operate that part of the road under the lease and agreement previously made with that company. Its operation has been attended with a very large expense, owing to the frailty of its structure, want of fencing, and the incomplete condition of the road, especially that part which crosses the marsh or low bottom lands east of Burlington, the track being so low as to be subject to inundation and washing away on every considerable rise of water in the Mississippi river. These expenditures, with the interruption of business and loss of revenue attending it, will continue until the road is placed in proper order and condition, and beyond the reach of the floods of that river. In the present embarrassed state of that company, and the incomplete condition of that road for the purpose of business and revenue, the directors can see now no other way of obtaining the re-payment of their advances to that company but to sell the securities pledged and thereby enforce their payments. Action in this behalf has been delayed in the hope that some satisfactory arrangement would be made for their payment or satisfaction without resort to these measures.

The notice given by the Galena and Chicago Union Railroad Company for the termination of the amended contract, for the use of their road from Chicago to the Junction, having been withdrawn, that contract will remain in force for two years longer, or until the first of May, 1861. This having been done it was not deemed necessary or expedient to take any steps the past year initiatory to the building of an independent line into Chicago, or changing our present relations with that company. The committee appointed by the stockholders, at the last annual meeting, to investigate and present these interests for their consideration, coinciding in this opinion, have deferred attention to this subject. It will be necessary, however, at some time during the present year, to decide upon the policy to be pursued in order that there may be sufficient time to carry out the views of stockholders before the expiration of the present contract with that company.

The directors have become convinced that, under the embarrassments that continue to surround the Quincy and Chicago Railroad Company, they will not be able to meet their original engagements with this company for the repayment of advances made on their account. The last advances were made with the hope and expectation that some satisfactory arrangement would be made with the Trustees, under the sanction of the bondholders of that road, for compromising and settling the issues that have grown out of the failure of that company to reimburse the sums advanced. The terms of adjustment that were offered by the stockholders, at their meeting in New York, have been approved by the Trustees and placed before the bondholders of that company for their sanction. If they are fully advised as to the present condition and future prospects of that road they will, undoubtedly, accept of the proposed compromise.

JOHN VAN NORTWICK, President.

#### Memphis, Clarksville and Louisville R. R.

We learn from the Clarksville *Jeffersonian* that the Commissioner of Railroads has made a final examination of the first thirty miles of this road, and finding the road-bed complete, and fully up to the requirements of the law, has given the necessary certificate to enable the company to draw the State aid, and the President has obtained thereon the \$300,000 of State bonds to which the company is entitled on the portion completed. This puts the company in possession of about \$220,000 of cash means beyond any immediate demands.

## Commerce of Canada.

(An abstract from the tables of "Trade and Navigation," exhibiting the results for the ten years ending 31st Dec., 1858, of which five years were before and five years after the enactment of "Reciprocity" with the United States.)

## 1. VALUE OF IMPORTS INTO CANADA.

Years.	Paying ad valorem duties.	Paying specific duties.	Entered duty free.	On goods paying ad valorem.	On goods paying specific.	Total duties collected.	Sea ports.	Inland ports.	United Kingdom.	British West Indies.	British North America.	United States.	Other foreign countries.	Total value of goods imported.
1849	\$8,978,978	2,097,624	388,801	1,085,886	932,808	1,778,189	8,239,660	3,770,758	6,676,011	14	135,655	4,971,420	167,298	12,010,398
1850	13,185,751	2,619,784	1,176,533	1,528,455	934,148	2,462,583	8,931,872	8,050,136	9,911,921	4,452	385,620	6,594,860	385,215	16,982,068
1851	16,551,062	2,973,044	1,810,686	1,911,753	1,037,993	2,949,756	11,480,408	9,954,388	12,048,132	13,626	436,972	8,366,765	570,296	21,484,791
1852	15,725,116	3,173,525	1,247,851	1,660,865	1,196,189	2,857,050	11,680,974	8,605,518	10,671,182	5,115	680,964	8,477,683	651,598	20,281,492
1853	26,084,359	4,171,165	1,775,912	2,790,096	1,324,611	4,114,707	18,220,296	13,761,140	18,489,121	3,478	632,661	11,782,147	1,074,029	31,981,436
1854	32,951,198	4,764,388	2,813,744	3,860,657	1,538,368	4,899,005	20,676,429	19,652,896	22,968,330	2,673	675,115	15,533,098	1,355,109	40,529,325
1855	19,971,470	5,929,168	10,385,586	2,216,315	1,309,467	3,525,782	11,476,015	24,610,154	13,303,460	14,135	865,988	20,828,676	1,073,909	36,086,169
1856	24,048,979	7,543,641	11,991,767	2,972,971	1,535,911	4,508,882	15,305,869	28,278,518	18,212,934	17,613	1,032,596	22,704,509	1,616,736	43,584,387
1857	21,464,491	6,688,208	12,407,904	2,862,257	1,042,784	3,905,041	14,561,884	24,868,714	17,559,025	26,823	423,826	20,224,651	868,211	39,430,598
1858	14,908,668	5,801,245	8,373,614	2,106,429	1,274,960	3,381,339	10,795,077	18,283,450	12,287,053	.....	426,372	8,038,377	565,687	20,539,087
Aver. 1st 5 years.	16,114,052	3,085,028	1,389,956	1,815,409	1,087,049	2,852,458	11,716,641	8,828,396	11,508,264	6,337	426,372	8,038,377	565,687	20,539,087
" 2d 5 "	22,631,961	5,915,327	9,194,513	2,707,724	1,340,298	4,048,022	14,663,055	23,178,746	18,865,160	12,249	749,882	18,985,800	1,129,210	37,741,801
" 10 "	19,378,007	4,475,177	5,292,285	2,261,561	1,188,674	3,450,241	13,136,848	16,008,571	14,184,212	8,793	588,127	18,511,868	847,448	29,740,419

\* The "Reciprocity Treaty" (18 Victoria, cap. I.) went into operation in Canada on the 18th October, 1854. The value of imports from the United States of the articles enumerated therein as free of duty has since been as follows:—In 1854 (11 weeks) \$581,644; in 1855 \$7,725,572; in 1856 \$8,082,821; in 1857 \$8,642,044; and in 1858 \$5,664,615.

## 2. VALUE OF EXPORTS FROM CANADA.

Years.	Classification of Exports.										Clearance.		Countries of Destination.				Customs' Additions.	
	Products of the mine.	Products of the sea.	Products of the forest.	Animals and products of animals.	V'g't'ble food and other veget. products.	Manufact'res.	Miscellan'ous merch'dise.	Sea ports.	Inland ports.	United Kingdom.	British West Indies.	British North America.	United States.	Other foreign countries.	Apparent total value of Exports.	For vessels built at Quebec and exported.	For under-valuation at inland ports, 20 p. c.	Actual Total Value of Exports.
1849.....	23,222		5,310,152	417,244	3,286,438	120,338	152,871	5,886,076	3,424,184	5,398,696	14,368	466,328	3,429,768	6,100	9,310,260	1,352,721	684,837	11,357,818
1850.....	\$36,583	146,052	5,442,987	630,321	4,237,896	26,708	159,496	5,769,576	4,910,417	4,803,400	8,376	808,776	4,951,160	108,281	10,679,998	1,281,720	982,084	12,948,795
1851.....	86,755	249,296	6,063,516	887,518	3,804,421	55,127	151,887	7,069,101	4,229,419	6,021,401	3,912	1,037,509	4,071,544	164,144	11,238,520	1,666,200	845,884	13,810,604
1852.....	38,576	297,048	6,575,389	1,183,719	4,725,457	79,133	107,601	6,747,412	6,258,165	7,064,457	13,961	812,509	4,264,522	188,495	13,005,574	1,500,400	1,251,692	15,307,606
1853.....	109,357	340,003	9,421,020	1,370,525	8,086,854	140,426	63,294	10,586,114	8,945,365	8,984,658	20,183	1,380,465	8,986,882	209,791	19,530,479	2,480,750	1,789,073	23,801,302
1854.....	298,928	349,711	9,981,367	833,273	7,363,052	169,749	44,984	10,191,656	8,849,408	8,668,464	8,989	1,529,275	8,649,002	185,329	19,041,052	2,208,250	1,769,880	23,019,189
1855.....	125,835	459,920	7,947,923	1,595,184	13,030,400	476,077	68,563	11,878,384	12,325,068	5,188,896	8,749	1,023,447	16,737,277	420,538	23,708,902	1,219,545	3,265,014	28,188,461
1856.....	165,648	466,347	10,019,883	2,564,059	14,972,276	873,628	48,138	11,372,707	17,222,332	9,254,666	10,803	1,086,041	17,979,754	263,776	28,595,039	1,213,078	2,238,900	32,047,017
1857.....	286,469	630,113	11,730,387	2,107,240	8,882,825	398,821	121,121	12,373,348	11,693,832	9,718,601	.....	875,329	13,206,436	266,699	24,066,976	1,383,444	1,556,205	27,047,017
1858.....	314,823	718,296	9,447,727	2,462,765	7,904,400	325,376	112,538	8,983,773	12,302,152	8,154,971	.....	960,428	11,930,094	240,432	21,285,925	743,640	1,443,044	28,472,609
Average 1st 5 years.	66,668	211,284	6,565,193	897,865	4,828,212	84,346	107,010	7,211,656	5,563,509	6,181,922	12,161	901,045	5,534,675	135,382	12,765,165	1,668,388	1,110,702	15,544,225
" 2d 5 "	238,839	504,878	9,825,457	1,912,504	10,430,591	348,730	78,080	10,860,156	12,478,517	8,263,119	4,708	1,094,866	18,700,513	275,354	23,338,580	1,353,592	2,054,008	26,746,760
" 10 "	161,996	388,081	8,194,325	1,405,184	7,629,401	216,538	92,545	9,035,906	12,478,517	7,222,521	8,434	997,965	9,617,594	205,388	18,051,871	1,510,975	1,582,555	21,145,502

## Journal of Railroad Law.

## LIABILITY OF INTERSECTING ROUTES IN THE CARRIAGE OF GOODS.

A question comparatively new in relation to the liability of common carriers, has arisen by reason of a peculiarity in modern systems of travel and carriage. It is seldom that one line or company own a route extending more than a hundred and fifty or two hundred miles. But goods, especially in this country of enormous distances, have often to be transported five hundred, or a thousand miles, over two, three, four, or even half a dozen different lines, intersecting with each other. In case of a loss or injury to goods (the danger of which is frequently increased by the numerous re-shipments), who is responsible to the owner? Is each line responsible for the carriage of the goods the entire distance, or responsible only for the performance of its own duty? A merchant ships a box of goods on the Erie Railroad for Chicago. They never arrive at the place of their destination, or arrive there only after long delays and injured. To whom is the owner to look for reparation? To the Erie Railroad? But if that road has safely carried the goods to Dunkirk, and there re-shipped them on the lake, it has fulfilled its duty. Must the owner then ascertain where the injury happened, and who is responsible for the neglect? Then every owner must travel with his goods, and trace them at every re-shipment. Justice, it seems, would be thus practically denied him. The question is not free from difficulties, and is, by no means, settled. We give our readers in this and the next week's article, four unreported cases decided at the General Term of the Common Pleas of this City, which throw some light on the question. From these cases the following principles may be deduced:

I. Ordinarily a common carrier is not responsible for injuries to goods occurring after they have passed to the custody of others, and beyond the terminus of his ordinary route.

II. But when a carrier undertakes to carry goods to a specified point for a stipulated price, he is responsible for their safe carriage the entire distance, although the place of their destination is beyond the ordinary terminus of the carrier's route.

III. To render him thus responsible, however, there must be a distinct agreement to carry the goods the entire distance. The mere expression of an opinion by the carrier's agent that they will go through right, is not enough to render the carrier so liable. Nor is the mere acceptance of freight for the entire distance, if the carrier receives it only as agent to pay over to the other carriers.

IV. The owner can, however, in all cases, hold the carrier responsible in whose possession the goods were, and by whose negligence they were injured, although his contract to carry was exclusively with another carrier, who undertook, and received freight for, the carriage of the goods the entire distance.

I. [JOSEPH J. DILLON vs. THE NEW YORK AND ERIE R. R. Co.]

This was an action to recover the value of two half pipes of brandy. They were delivered to the defendants who gave a receipt for them in these words:

"New York, 13 April, '54. Received of James Auchincloss, in good order, per New York and



Erie Railroad, two half pipes of brandy, marked Nicholas N. Knox, St. Paul, Minnesota Ter., care of B. H. Campbell, Galena, Ill."

Knox, the owner of the brandy, directed it to be shipped according to the receipt. Before shipping it, he asked the General Freight Agent of the defendants, if it was necessary to have an agent at the terminus of their road, or at Chicago, to receive it of an attache of the road. The agent said it would be unnecessary, the pipes would be shipped right on through. Knox then told him how they were directed, and the agent said that is all that is necessary, they will be forwarded on to you. It further appeared from a written stipulation, entered into upon the trial, that the goods were carried by the defendants to Dunkirk, the western terminus of their road, and there, in the usual course of transportation, delivered to a transportation line, or company, connected with the Erie Railroad, and engaged in transporting merchandise from Dunkirk towards the place of the ultimate destination of the goods in question, which re-shipment was according to the custom and usage in respect to the transportation of merchandise.

The opinion of the Court was rendered by

DALY, J.—There was nothing in the evidence to warrant the Court below in finding that the defendants undertook to carry the brandy to the place of destination. They merely engaged to carry it to Dunkirk, the terminus of the road, and to ship it, or forward it, from there by the usual line of conveyance to Galena, the place of destination, and this they did. Their liability as common carriers ceased at Dunkirk, and they then assumed the character of forwarders. (*Van Santvoord vs. St. John*, 6 Hill 158. *Farmers' and Merchants' Bank vs. Champlain Transportation Co.*, 16, Vorn 62; 18, *id.* 131. *Howe vs. New York and New Haven R. R. Co.*, 22, Conn. 1. *Nutting vs. Connecticut River R. R. Co.*, 1 Gray, 502. 1 *Parsons*, on Contracts, Note, p. 661.

In *Weed vs. Saratoga and Schenectady R. R. Co.*, 19 Ward, 534, the two lines were connected together by an agreement between themselves, and the defendants took the pay in advance for the conveyance of the plaintiff and his baggage for the whole distance.

Such was also the case in *Hart vs. The Rensselaer and Saratoga R. R. Co.*, 4 Seld., 37, and in *Wilcox vs. Parmlee*, 3 Sanf., 610; the defendants agreed in writing, to forward the goods of the plaintiff from New York to Fairport, to the close of the season, at a certain rate per 100 lbs., and the Court, though the word *forward* was used, held that this was an agreement, in substance, to carry the whole distance for a specified price. In these cases the carrier received, or it was agreed that he should receive the amount paid for transport to the place of destination, and thus having received, or contracted to receive, the full reward, he was bound to perform the entire service. But nothing of the kind appeared in this case. The enquiry made by Knox, showed that he knew that the defendants road terminated at Dunkirk. He merely asked if it would be necessary to have an agent at that place, or at Chicago, to receive the goods, and was told that it would not; that the goods would be "shipped right on through," that they would be forwarded on to him, that the directions that were on the goods were all that were ne-

cessary, and what the defendants engaged to do upon the arrival of the goods at Dunkirk, they did, by delivering them to a transportation line engaged in transporting merchandise from Dunkirk to the place where the goods were directed. The reply to Knox by the freight agent that it would be unnecessary to have an agent to receive the goods at Chicago, that they would be shipped right on through, was as respects anything beyond the terminus of his own road, but the expression of an opinion, or belief, that the goods would be duly forwarded upon arriving at Chicago to the place to which they were destined, and cannot be construed as an engagement, or undertaking, on his part, or behalf of the defendants, to carry them, or to be responsible for the carriage, to the ultimate place of destination. The judgment should be reversed.

## II. [LOUIS KREUDER vs. HENRY H. WOOLCOT AND OTHERS.]

In this case the facts are fully stated in the opinion of the Court, which was rendered by DALY, J., and were substantially as follows.

The firm of W. & B. Lange imported 23 cases of wine. They were taken from the vessel in which they arrived from Europe and were put on board one of the tow-boats of the Swiftsure line. When the cases were delivered on board the tow-boat, an order on the inspector of the vessel in which they were imported, in these words—

SIR—You will please send No. 44, one case to W. & B. Lange C. W. L. pier 1, N. R.—Nos. 44-63 and 65-67, twenty-three cases to the Swiftsure Line Tow-Boats, foot of Broad street, and hand the receipt to

W. & B. LANGE.

was handed to the receiving Clerk of the Swiftsure Line, and he endorsed upon it:

Rec'd on Barge M. Barnes, 23 Boxes. Sept. 6, '55.

Emilie Lange of the firm of W. & B. Lange of St. Louis, Mo., then went to the office of the defendants who are the agents of the Union Transportation line and shipped the wine from New York to St. Louis.

The defendants signed a bill of lading by which they agreed to forward the twenty-three boxes to St. Louis for a certain sum or charge for freight which was specified. E. Lange asked them who was their agent in St. Louis and they told him it was Gilbert Knapp, Jr. When the bill of lading was made out by the defendants it may fairly be presumed that the order and receipt above set forth was produced to them as the receiving clerk of the Swiftsure line testified that the bill of lading is usually made from the cart receipt.

The bill of lading is for twenty-three boxes mdse 44-63 and 65-67. E. Lange testifies that some one in the office put the name of Knapp on the bill and in the margin of the bill is the following entry—

"C. W. L." for Metzger & Lange, St. Louis, Mo., care Gilbert Knapp, Jr., St. Louis.

The boxes were shipped on the 7th of Sept., 1853, and in the fall of that year they were received and shipped by Geo. M. How of La Salle, Illinois, on board the steamer Excelsior plying on the Illinois river, and were brought by that boat to St. Louis. As the captain of the boat could not ascertain by whom they were shipped from New York, nor to whom they were shipped in St. Louis, for the only mark upon them was the three letters C. W. L., the captain placed them on

storage, with an auction firm in St. Louis. He made diligent efforts to find the consignees, but without success and then had them advertised for one month in a newspaper published in English in St. Louis, after which he advertised them for another month in a newspaper published in German in the same place, and no one appearing to claim them, they were sold at public auction to pay freight and charges.

W. & B. Lange sent the bill of lading received by them to E. Lange of the firm of Lange & Metzger in St. Louis, and E. Lange called several times on Gilbert Knapp Jr., in St. Louis, but learnt nothing of the goods. On the 31st of December, 1853, Knapp's clerk gave him a memorandum to the effect the boxes had arrived, and Lange transmitted it to W. & B. Lange, the consignors. After Lange had called upon him, Knapp made inquiries in relation to the boxes and ascertained that they had been sold and the proceeds after deducting the charges of the auctioneer, had been paid to the owner of the steamer that brought them to St. Louis. The plaintiff is the assignee of W. & B. Lange.

Upon this statement of facts, there can be no doubt of the plaintiff's right to recover. The agreement in the bill of lading to forward the goods from New York to St. Louis and the specification in the bill of lading of the amount of freight for the whole distance, show that the defendants undertook as common carriers to deliver the goods in St. Louis. *Wilcox vs. Parmlee*, 3 Sanf. S. C. 610. *Weed vs. the Saratoga and Schenectady R. R. Co.*, 19 Wend. 534. *Hart vs. the Rensselaer and Saratoga R. R. Co.*, 4 Seld. 37. The defendants were not forwarders but carriers. A simple engagement to forward goods at New York marked for a particular destination, is discharged by shipping the goods by the usual or most direct conveyance to the place designated, but an agreement to forward them from New York to the place of destination, the charge for freight for the whole distance being specified in the agreement, is very different. It is an agreement to carry them for that distance or to be responsible for that distance for the safe carriage and delivery at the place designated in the agreement.

The defendants told the shippers that Gilbert Knapp Jr., was their agent at St. Louis, and from their own testimony it appears that they were in the habit of consigning freight to him; by putting his name in the bill of lading they made him the immediate consignee at St. Louis, and they told E. Lange to call upon him at St. Louis to hear about the goods. Lange did so and did all that was incumbent upon the shipper to do. It was the duty of the defendants to see that the goods were duly delivered to Knapp at St. Louis or at least to have advised him in time that the goods were shipped to his care. If they had so advised it may fairly be presumed that the goods would not have been sold for the payment of charges. They engaged to carry the goods as they were marked. The initials C. W. L. in the margin of the bill of lading are placed between quotation marks sufficiently indicating the mark upon the goods, and that the defendants knew that they were not marked to Lange & Metzger or to the care of G. Knapp, Jr. If the defendants were not satisfied to carry them thus marked, they

should have said so. They, therefore, engaged to carry the boxes marked as they were and deliver them to Knapp at St. Louis, and having failed to do so are liable for the value of the goods.

The judgment should be affirmed.

**Summary of the Performance and Cost of Locomotive Engines on the Baltimore and Ohio Railroad for June, 1859.**

<b>FIRST DIVISION.—No. of passenger engines.</b>		6
Average number of miles run by each engine		2,499
Miles run to one cord wood (lighting fires)		1,304
" " quart of oil		43.2
Pounds of coal consumed per mile run		20.3
Cost of repairs per mile run		3.6c.
" fuel " "		2.5c.
" stores " "		0.5c.
Total cost " "		6.6c.
No. of tonnage engines (including switching engines)		58
Average No. of miles run by each engine		1,625
Miles run to one cord wood (lighting fires)		611
" " quart of oil		26.1
Pounds of coal consumed per mile run		54.9
Cost of repairs per mile run		8.4c.
" fuel " "		7.5c.
" stores " "		0.8c.
Total cost " "		16.7c.
<b>SECOND DIVISION.—No. of passenger engines</b>		4
Average No. of miles run by each engine		2,968
Miles run to one cord wood (lighting fires)		624
" " quart of oil		56.0
Pounds of coal consumed per mile run		21.7
Cost of repairs per mile run		4.4c.
" fuel " "		1.9c.
" stores " "		0.5c.
Total cost " "		0.8c.
There are also on this division three wood burning passenger engines;		
Average No. of miles run by each engine		2,161
Cost of repairs per mile run		3.5c.
" fuel " "		6.4c.
No. of tonnage engines		36
Average No. of miles run by each engine		1,687
Miles run to one cord wood (lighting fires)		1,065
" " quart of oil		30.0
Pounds of coal consumed per mile run		60.0
Cost of repairs per mile run		7.8c.
" fuel " "		5.2c.
" stores " "		0.7c.
Total cost " "		13.7c.
<b>THIRD DIVISION.—No. of passenger engines</b>		4
(10 wheel engines, weighing 60,000 lbs.)		
Average No. of miles run by each engine		2,090
Miles run to one cord wood (lighting fires)		981
" " quart of oil		27.4
Pounds of coal and coke (about equal quantities of each) consumed per mile run		59.9
Cost of repairs per mile run		7.8c.
" fuel " "		5.7c.
" stores " "		0.9c.
Total cost " "		14.4c.
No. of tonnage engines		36
Average No. of miles run by each engine		1,098
Miles run to one cord wood (lighting fires)		1,198
" " quart of oil		21.0
Pounds of coal consumed per mile run		91.6
Cost of repairs per mile run		13.0c.
" fuel " "		4.6c.
" stores " "		1.1c.
Total cost " "		18.7c.
<b>FOURTH DIVISION.—No. of passenger engines</b>		8
Average No. of miles run by each engine		2,280
Miles run to one cord wood (lighting fires)		1,027
" " quart of oil		37.7
Pounds of coal consumed per mile run		20.5
Cost of repairs per mile run		8.0c.
" fuel " "		2.5c.
" stores " "		0.8c.
Total cost " "		11.3c.
There is also upon this division one wood burning passenger engine;		
Average No. of miles run by each engine		3,015
Cost of repairs per mile run		7.5c.
" fuel " "		5.0c.
No. of tonnage engines		24

Average No. of miles run by each engine	1,035
Miles run to one cord wood (lighting fires)	483
" " quart of oil	22.9
Pounds of coal consumed per mile run	54.5
Cost of repairs per mile run	9.8c.
" fuel " "	3.8c.
" stores " "	1.1c.

Total cost " " 14.2c.

NOTE.—Cost of repairs includes the cleaning of engines.

**The United States Patent Office—Sketch of its History.**

(From the Constitution.)

To the student in pursuit of knowledge upon any branch of science and invention there is no museum or collection of material in this country at all to compare with that so beautifully and artistically arranged in the spacious halls and galleries of the Patent Office. Like the other institutions of the Federal Government, the growth of this office has increased with the development of the resources and rapid expansion of the power and population of the Republic. A glance at its history shows that such an establishment early attracted the attention of the wise and able men of the revolutionary era. Hence we find that, on the 10th of April, 1790, Congress passed an act authorizing the Secretary of State, the Secretary of War, and the Attorney-General, or any two of them, to grant patents for such new inventions and discoveries as they should deem sufficiently useful and important. This act, which originated the Patent Office, was repealed, and a new act passed on the 21st of February, 1793. Under this latter act, patents were confined to the citizens of the United States, and they were to be granted by the Secretary of State, subject to the revision of the Attorney-General. By the act of the 17th of April, 1800, the privilege of suing out a patent was extended to aliens of two years' residence in the United States, and the act of July 13, 1832, only required the alien to be a resident at the time of his application for a patent, and to have declared his intention, according to law, to become a citizen. By the act of Congress of July 4, 1836, all former laws on the subject were repealed, and the patent system re-enacted with important improvements, embodying a new organization of the office, and conferring upon it much more extensive powers than it had heretofore possessed. Under this act the establishment was organized essentially as it exists at this day, except that by subsequent acts the power of appeal was allowed from the decision of the Commissioner to either of the judges of the Circuit Court of the District of Columbia. The Patent Office occupied a part of the General Post Office building, which was destroyed by fire on the 15th of December, 1836. All its invaluable contents were lost by this sad accident; and by the act of 3d of March, 1837, Congress provided for the recording anew of patents, and assignments of patents recorded prior to the date of the conflagration, and for issuing new patents for those destroyed. The officers of the Patent Office were also directed to procure duplicates of the most interesting models destroyed, at an expense not exceeding \$100,000. The loss of the Patent Office, or rather of its contents, caused a deep sensation throughout the country, and universal regret was expressed on all hands at this untoward event. Even the ruthless Admiral Cockburn, who fired the Capitol and President's House, and other public edifices in this city, had spared the Patent Office, and yet accident in a few hours, destroyed the labors of many men for many years, which even that modern barbarian feared to touch.

This sketch of the legislation of Congress on the subject of patents, familiar as it is to the professional man, may give to the general reader an idea of the early and continuous importance attached by the law-makers to this important branch of the Government. Growing out of, and forming as it were an integral portion of, the patent system is what may be termed the patent-law branch of our jurisprudence. The minds of the most eminent of

our jurists, both on the bench and at the bar, have been taxed to the utmost by the intricacy and subtlety of the investigations of many cases which have arisen and been adjudicated upon under these laws. A legal writer justly terms the patent-law branch of our jurisprudence "the metaphysics of the law." And so it must continue to be, and to increase, because of the increasing spirit of improvement in agriculture, and manufactures, and machinery, both here and in Europe. The Patent Office is essentially and necessarily a national institution in every sense of the word, and will always remain, inasmuch as it would be impracticable for the States separately to make provision for the effectual protection of the rights secured to inventors under the patent laws.

All parties concerned in patents, whether as inventors or users of the machines for which they are granted, are fully aware of the importance of the faithful execution and enforcement of the patent laws; and there is no class of cases tried in our courts in which the community generally take more interest.

In all countries, and in all ages, inventors or discoverers of any new agent or implement useful to man in his varied pursuits, have been considered as among the most valuable citizens of the State, and deserving of its encouragement and protection. Of late years this appreciation of such men seems greatly to have increased, both in the United States and in Europe. We trust that it will ever be so, and that worth and merit, in whatever walk of life it may develop itself, may always meet with recompense and reward.

**Cambria Railroad Iron—Street Rails for Passenger Railroads in Western Cities.**

Wood, Morrell & Co., lessees of the Cambria Iron Works, during the twelvemonth beginning July 1, 1858, and ending June 30, 1859, manufactured 28,872 tons of iron rails. This large quantity was all made to order, for railroad companies in the West and South-western States, except a portion used by the Pennsylvania Railroad Company, in their tracks at Altoona, and elsewhere in the vicinity of the Alleghany mountain, where the character of the service performed requires that the rails shall be of the best and most enduring quality of iron.

The geographical position of the Cambria Iron Works, at Johnstown, at the base of the western slope of the Alleghany mountain—whence a line of canal via the river route, and a line of railroad via Greensburg, opens two outlets to free river navigation at Pittsburg, whence by steamboat rails can be delivered at all points on the navigable waters of the West, and by car to all inland places not accessible by water craft—enables the lessees to send their excellent rails into a vast market, upon terms mutually advantageous to the railroad companies and the iron-masters.

The reputation of Cambria rails is unsurpassed; and this fact considered in connection with the mineral resources of the immense landed estate belonging to the Cambria Iron Company, abounding with coal and ore, renders it certain that, under the efficient management of the present lessees, the Cambria Iron Works will continue to acquire new importance, and fill orders in larger amount from year to year.

For the supply of street rails for city passenger railroads in Western cities, Wood, Morrell & Co. possess unequaled facilities. And a knowledge of this truth prompted us, months ago, to allude to this new source whence orders for Cambria rails would be forthcoming. It, therefore, gives us pleasure to announce that a contract has been entered into with the lessees for street rails for the Pittsburg City Passenger Railroad; and soon, we have no doubt, other contracts will be made for street rails to be laid down in Cincinnati, Louisville, St. Louis, Chicago, New Orleans, and other cities. Everywhere in the cities of the West and South, is public attention called to the matter of horse railroads in the public streets, and soon the tracks will be down and the cars in motion.—U. S. R. R. & M. Reg.



**Louisville and Nashville Railroad.**

The Louisville and Nashville Railroad Company was chartered by the Kentucky Legislature, March 5th, 1850. Its capital stock was fixed by the act of incorporation at \$3,000,000, with the privilege of an increase to \$4,000,000. On the 17th of June of the same year, the City Council of Louisville subscribed for \$1,000,000 of the stock which was ratified by a vote of the people August 23d. On the 4th of September following, the stock books of the Co. were opened, and \$100,000 having been subscribed, a meeting of the stockholders was held September 27th, and seven directors elected. These directors chose L. L. Shreve, first President of the corporation.

**L. L. SHREVE'S ADMINISTRATION.**

Mr. Shreve acted as President of the company from September, 1850, to October, 1854. In June, 1851, the City Council made an appropriation of \$1,000 towards surveys for the route of the road, and authorized the employment of L. L. Robinson as engineer. Under this act of the council, Mr. Robinson began the survey at the junction of Broadway and Seventh streets, in August, 1851. On the 8th of December, 1852, the first division of the road was located by resolution of the Board of Directors. On the 13th of April the company contracted with Seymour, Morton & Co., to build the whole road in two and one-half years, and the work of construction was begun the first Monday in May of the same year.

On the 1st of October, 1852, Mr. Shreve made his first annual report to the stockholders. At that time the stock subscriptions of the company amounted to \$1,600,000, and the expenditures to \$24,598.52. On the 1st of October, 1853, he made his second report, showing a stock subscription of \$3,328,700, while the receipts of the Company had been \$146,502 70, and its expenditures \$115,861 85. His annual report, June 19th, 1854, at a called meeting of the stockholders, showed the receipts of the company to that date to have been \$1,313,394 43, and its disbursements \$817,179 46.

**GOV. HELM'S ADMINISTRATION.**

The Hon. John L. Helm was elected President, as successor to Mr. Shreve, October, 1854, and he still holds that position. When his first annual report was made, October 1st, 1855, the receipts of the company had been \$1,559,562 34, and its expenditures \$921,840 23. The total stock subscriptions were estimated at \$4,034,550 May 30th, 1855. His second annual report, October 1st, 1856, showed the expenditures of the Company to be \$1,467,260 26, and its total available assets were estimated at \$2,422,735 12. These assets included the second million subscribed by Louisville, which, if added to previous stock subscriptions, would make a total of \$5,034,550. His third report, October 1st, 1857, showed total expenditures \$2,589,150 19, and assets \$1,704,502 08. And his fourth and last report, October 1st, 1858, showed total expenditures \$3,834,980 07, and remaining assets \$661,714 51.

**MR. GUTHRIE'S ADMINISTRATION.**

In the spring of 1857, the Hon. James Guthrie left the Treasury Department of the Federal Government and came home. He was made Vice President of the company, and though nominally occupying this subordinate position, he has really been the head and front of the enterprise. The health of Gov. Helm was bad, and physical inability rendered it impossible for him to lead the enterprise. The Vice President has, therefore, been the real President, and the progress of the road since March, 1857, in spite of difficulties insuperable to almost any financial head, has shown the skill and might of Mr. Guthrie.

It will be seen by reference to the estimates, that from the act of incorporation in March, 1850, to March, 1857, a period of seven years, or from the beginning of the work of construction in May, 1852, a period of five years, the company only expended about \$1,500,000 in constructing a road that was to cost \$7,000,000. This mode of building railroads did not suit Mr. Guthrie's go ahead notions. He went to work, and in spite of the terrible financial crisis of 1857 and 1858, he man-

aged to swell the expenditures to \$2,289,150 19 by October, 1857, and to \$3,834,980 07 by October, 1858. His theory was to spend as much money as he could judiciously use in rushing the road to completion instead of letting it drag along at a snail's gallop until interest and the salaries of officers eat up the assets. He has pushed his theory right ahead with his wonted inflexible and untiring perseverance, using the credit of all the friends he could enlist to raise money, and finally bonding the company and mortgaging the road to the amount of \$2,000,000. He has sold nearly a million and a quarter of these bonds right here at home, and raised money enough to make the early completion of the entire road a fixed fact.

The main road is now being run over by daily trains of cars from Louisville across Green river at Mumfordsville, a distance of 74 miles. At the Nashville end, the cars are running over the whole distance of 71 miles between Bowling Green and Nashville, except nine miles which are now ready for the iron. There are, therefore, 136 miles of the main road, over which the cars are now running, which will leave only forty-eight miles yet to be completed. On these forty-eight miles much of the greater part of the work is done, and the cars will run over the whole line, from Louisville to Nashville, before the first day of January next.—*Louisville Courier.*

**Trade of San Francisco.**

We copy the following from the San Francisco Bulletin, giving a resume of the trade of that city for six months ending June 30:

**FOREIGN COMMERCE.**

From domestic Atlantic ports, Great Britain, France, China and the East Indies, the aggregate tonnage for the first half of each of the three years was as follows:

1857, tons, first six months.....	83,088
1858, tons, first six months.....	81,020
1859, tons, first six months.....	126,555

The foregoing shows an increased inward tonnage movement from the principal quarters whence our supplies are derived of more than 52 per cent. the present year over 1857, and nearly 55 per cent. over 1858. A most forcible commentary upon the condition of our overstocked market is afforded by the above data.

These excessive importations are further illustrated by a comparison of the amount of freight money paid during the same period as follows:

Freights paid first six months, 1857...	\$1,465,884
Freights paid first six months, 1858...	1,275,816
Freights paid first six months, 1859...	2,355,114

As it is only in exceptional cases that vessels arrive here with anything less than full cargoes, the amount of their tonnage correctly shows the extent of our imports; but our exports are better exhibited by their market values. The following is a comparative statement of the exports, other than treasure, for the first half of each of the last three years:

First six months of 1859.....	\$2,324,734
First six months of 1858.....	1,795,445
First six months of 1857.....	2,072,012

**THE QUICKSILVER TRADE.**

The exports of quicksilver for the first half of the last three years were as follows: In 1857, 11,938 flasks; in 1858, 13,452 flasks; 1859, 581 flasks. This immense falling off is solely attributable to the suspension of operations at the New Almaden Works, caused by yet existing litigation as to the proprietorship.

**EXPORTS OF GOLD.**

The exports of treasure for the first six months of 1859, 1858 and 1857 were as follows:

First six months of 1859.....	\$23,685,562
First six months of 1858.....	23,537,575
First six months of 1857.....	23,743,489

This shows a remarkable approximation for the periods names, and together with other indications, gives rise to the opinion that the sum total of the present year will be fully up to that of either of the former, if it does not somewhat ex-

ceed them. The annual product of the mines is doubtless as great as ever, but can never be judged of accurately by the exports, as these are governed to a great extent by financial emergencies abroad.

**OPERATIONS OF THE MINT.**

The deposits of gold bullion at the United States Branch Mint in this city, for the first half of 1859 and 1858 were as follows:

Ozs.	
First six months of 1859.....	440,342.87
First six months of 1858.....	663,387.69

Falling off.....223,044.82

This large decline the present year is attributable to the prolonged winter, which prevented operations in many important mining sections till late in the season.

**MOVEMENT OF PASSENGERS.**

The movement of passengers, arriving and departing by sea, for the next six months of 1859, is denoted as follows: Arrived, 17,034; departed, 11,103; gain, 5,931. During a corresponding period of 1858, owing to the Fraser River exodus, there was a net loss of 202. During a like period of 1857, there was a gain of 4,295. The gain from arrivals by sea for the entire of 1858, notwithstanding the loss adverted to in the first half of the year, was 12,745, which somewhat exceeds the average gain of 1859. The greatly reduced prices of fare, however, which have lately depleted our population, must swell the total gain of the year, since sufficient time has not yet elapsed for us to have experienced its benefits along with its disadvantages.

**Railroad Earnings.**

The traffic of the Great Western Railway of Canada for the week ending July 15, 1859, was as follows:

Passengers.....	\$17,999 26
Freight and live stock.....	7,882 66
Mails and sundries.....	1,515 98

Total.....	\$27,397 91
Corresponding week of last year.....	33,904 36

Decrease.....\$6,606 45

The receipts of the Grand Trunk Railway of Canada for the week ending July 9, were.....\$39,707 94  
Week ending July 10, 1858.....38,883 97

Increase.....\$823 96

Total traffic from July 1st.....	\$51,188 41
Same period last year.....	51,923 42

Decrease.....\$735 01

The following is a comparative statement of the earnings of the Northern Central Railway Company for the month of June:

From	1859.	1858.	Increase.
Merchandise.....	\$32,643 98	\$25,983 49	\$6,658 40
Coal.....	18,091 51	10,883 23	7,208 28
Passengers..	19,422 93	16,686 92	2,739 01
Mails.....	2,425 00	1,437 50	1,037 50
Sundries....	84 09	.....	84 09
	\$72,667 51	\$55,043 14	\$17,624 37

**Eaton and Richmond Railroad.**

We learn that substantial improvements have been made upon the line of this road, between Hamilton and Richmond, during the last year, and that the bridge structures and road-bed are to be renewed at various points this season. The Corners Branch culvert, 3 miles below Richmond—80 feet long, with a 20 feet span—is now completed, and is a substantial piece of masonry. All the wooden structures between Eaton and Richmond will be replaced with substantial stone work. The bridge at Somerville is to be rebuilt, and ten thousand

new cross-ties put in, as early as practicable. Two hundred tons of new iron will be laid in the track before the close of September.

## American Railroad Journal.

Saturday, July 30, 1859.

### Free Passes on the Erie Railroad.

We understand that the cardinal point so long made by this company to grant no free passes, has, like some other of its "rules founded upon principle," gone the way of all the earth. The dead-head system is restored. To what extent we do not care to enquire; but the principle so long contended for by Mr. Moran is completely given up.

Without going into the policy of having a *dead-head* list, we may say that the thing is considered indispensable, and is practised by our best managed roads. If it has been found politic for the Erie to return to it, it was certainly impolitic to abolish it altogether. This company pertinaciously held on to its position till all the injury was suffered that a mistaken policy could inflict. It now yields, when yielding will gain neither credit nor friends. A disposition to institute radical changes in important affairs ought always to be accompanied by a keen appreciation of their effect; so that an obnoxious point can be receded from before its injurious effects can be felt, and before the moral position of their authors can be weakened. To adhere to them till forced to yield by the pressure of necessity, implies more stubbornness than good sense, and more self-will than high principle.

### "The American Railway Bureau" and "American Railway Review."

The "American Railway Bureau" is an organization recently established in this city, ostensibly for the purpose of collecting information touching the condition of our railroads; whereof Hon. Myron H. Clark is President, Charles B. Stuart is Consulting Engineer, and Samuel P. Lyman, Secretary. Of these three, Mr. Lyman is probably best known to the public. The "Review" is its organ, though the exact office it is to execute, we have not yet a very clear idea. If these gentlemen propose to spend their time and means in collecting and diffusing information in reference to our railroads, such public spirit and unselfishness cannot be too highly commended.

There is one feature connected with this enterprise, which would seem to interfere somewhat with the entire disinterestedness of the undertaking, and the reliability of the information to be made public. The president of the "Bureau" is busily engaged in bringing out new railway schemes. It is not too much to suppose that he can command for them the endorsement and support both of the "Bureau" and "Review," he furnishing, as we understand, a considerable portion of the capital necessary to their support. We presume we are not uncharitable in supposing that the "Bureau" and "Review" would turn a penny in the same way, should an opportunity offer. In plain truth, we suppose the great object of this enterprise is to put new schemes upon the public instead of warning it against old ones. With such objects in view, it may not be a very safe mentor to railway investors.

### Running Roads by Contract—the Philadelphia, Wilmington and Baltimore R. R.

The only railroad in this country in which the contract system has been adopted, is the Philadelphia, Wilmington and Baltimore. The favorable results that have followed this experiment should commend it to the attention of every railroad company in the country, and should secure the adoption of a system in which the amount of compensation is made to depend upon the capability, industry, and faithfulness, of the parties employed. On this road, to quote the report of the President, "nearly all the service, excepting the repairs of bridges, the Treasury department, and that of the conductors and supervising officers, is performed by contract instead of fixed salaries." In commenting upon the change of system, he further says: "Nothing can more effectually secure promptness, energy, and thoroughness, than this system properly carried out in the hands of faithful contractors. Our trains have never been run with so much regularity; our road, cars, and engines, have never been in so good order as now. We do not mean to say that this state of things could not have been brought about under the old system—but we are certain it could not have been accomplished as cheaply, and so easily, as under the contract system. Under proper restrictions, it will be one of the most important means to work out a radical improvement in the value of railroad property. Public works rarely succeed under the management of State government, from a want of individual responsibility and pecuniary interest in the success of the work. Private corporations generally succeed better than State governments in the management of public works, because individual care and interest can be better called into action; but even here that keen vigilance in all departments, and particularly in the expenditure of money, which is the true element of success in private business, can rarely be attained. If all the employees of a corporation could be made pecuniarily interested in its safe and economical management, its success would be more certain, extravagant expenditures would be avoided, and accidents much more rare. A proper contract system secures all those important objects, when faithfully carried out by competent men."

We commend this example not only to the directors of the Erie railroad, but to railroad companies and to the stock and bondholders in all our roads. In railway affairs there is no better authority than the gentleman who has inaugurated the contract system; no person of wider or more valuable experience. Let us see what his system has done for his road, and what it cost to operate it in comparison with other lines.

Statement showing the operations of the Philadelphia, Wilmington and Baltimore R. R. Co. for three years past.

Years.	Gross Receipts.	Current Expenses.	Ratio of net receipts to current expenses.
1856 .....	\$1,105,101	\$581,335	47
1857 .....	1,119,910	502,408	55
1858 .....	1,075,962	456,723	58

The current expenses embrace all moneys expended in construction, and sufficient to keep the road in efficient condition.

The statement subjoined will show in detail the

cost of some of the leading items of service for the three past years:

Years.	N <sup>o</sup> of miles run.	Cost per mile of Locomotives.	Cost p. mile run.	Total cost of Fuel.	Cost p. mile run.	Cost of Oil and Waste.	Cost p. mile run.
1856 ..	459,976	\$27,282	5.9	91,029	19.8	4,463	.97
1857 ..	429,035	23,174	5.4	68,149	15.8	4,343	1.01
1858 ..	388,670	19,070	4.9	57,395	14.7	2,836	.73

Notwithstanding such results, this road is one of the most expensive to operate and maintain in the United States. Both terminations are in large cities—a fact which always adds largely to the cost of conducting a road. It has much more than the usual number of perishable structures, crossing as it does numerous and wide indentations of the Chesapeake Bay. The continuity of its track is broken by the Susquehanna river, rendering necessary the maintenance of expensive steam ferry boats as well as two distinct sets of engines and cars. With a continuous line, the road is just about of the right length, 98 miles, for running the trains with the greatest economy. Both in Philadelphia and Baltimore the passengers have to be transported, at considerable additional expense, either by steamboats, horse cars, or wagons, to the depots of other roads. Its fuel, which is almost entirely wood, costs high. Almost every circumstance connected with this road is against its being cheaply operated. Till the reforms now introduced were made, the current expenses did bear a very large ratio to the gross receipts. With them, the road now shows more favorable results than any other in the country.

The expenses for the last year, in detail, were stated as follows:—

OPERATING EXPENSES.	
Repairs of road .....	\$46,849 16
Do. bridges .....	13,411 15
Do. fences, stations, b'd'gs, etc. ....	10,982 87
Do. locomotives .....	24,688 37
Do. passenger & merch'dise cars .....	16,745 06
Expenses of passenger department ..	56,928 44
Do. freight .....	55,598 99
Switchmen, watchmen, etc. ....	12,861 55
Gratuities, etc. to employees injured and sundry allowances to parties receiving injuries while crossing the road .....	1,895 33
Taxes and insurance .....	12,778 80
Law expenses .....	5,905 21
Office, salaries, etc. ....	20,974 88
Ferries .....	22,170 52
Rents .....	6,014 18
Wood and coal for locomotives. ....	57,395 77
Coal for other purposes .....	1,411 84
Oil, tallow, waste, etc. ....	8,611 67
Magnetic telegraph .....	3,496 26
Removing ice and snow .....	103 07
Miscellaneous .....	15,595 12

\$394,418 25

EXPENDITURES FOR NEW WORK.	
New track .....	\$38,338 77
" bridges .....	409 43
" fences .....	188 95
" locomotives .....	1,606 07
" baggage cars .....	2,235 42
" merchandise cars ..	2,566 64
" stations, build'gs, etc. ....	2,974 18
" engine house at Baltimore, .....	13,985 33

62,304 79

\$456,723 04



How has such a saving been brought about? The President in his report tells us—"By making employees feel a pecuniary interest in the safe and economical management of the road." This is the simple recipe for such marvelous results. This road is run by contract. It is consequently made the interest of every person employed to reduce expenses to the lowest limit. Yet the President tells us that "the trains have never been run with so much regularity: the roads, engines and cars have never been in such good order as under this contract system." It has restored the finances of the company. It gives the stockholders what they did not get without it, regular dividends. It gave them last year 58 per cent. of the gross earnings of a road, certainly one of the most difficult and expensive to run and maintain in the United States. The Philadelphia, Wilmington & Baltimore, would be an ideal road for many of our railroad managers. In their easy slipshod, do-nothing way, they could, with a good easy conscience, charge the whole amount of earnings to expenses, and think they had done well at that. They would have thought it an ample vindication of themselves to have pointed to the line of the road, with its track at the Susquehanna, cutting off nearly all income from freight; to its numerous bridges; to its expensive termini, and to the great cost it is at in receiving and delivering its passengers. Yet by steady perseverance, and the adoption of a proper system, all these difficulties have not only been overcome, but the road rendered one of the most productive in its receipts, of any in the country.

Now that the subject of placing the working of the Erie under a similar system is before the public, we refer the stock and bondholders of this road to the illustration given. We have not been afraid that the correctness of our arguments in favor of a similar system for the Erie, would be controverted in the abstract, but that it would be met by the ordinary argument of the incapable and incredulous, "Oh, this is all very fine to talk about, but it will never work in practice." It has worked in practice, and most favorably. Is not the example set worth trying by the stock and unsecured bondholders of the Erie? As at present conducted, is there a shadow of a chance for them? Yet if the road could be run for 60 cents on the dollar, enough would be realized to pay the interest on the entire debt of the company. Nothing is to be lost by adopting the contract system. Much may be gained by it.

#### Atlanta and West Point Railroad.

The following is a statement of the business of this road for the year ending July 1st:—

Receipts from passengers .....	\$179,876 58
From freights .....	161,640 63
From mails .....	20,543 76

	\$362,060 98
Expenditures .....	164,701 22

Net profits .....	\$197,359 76
Increase, over previous years in passengers .....	\$34,298 32
In freights .....	34,766 56

Total .....	\$69,064 88
Total bales cotton .....	63,019
Increase .....	25,503
Total passengers carried .....	66,518
—equivalent to 4,490,505 carried one mile.	

#### How Fast Rails Depreciate, and how much it Costs to Maintain Road-bed and Superstructure.

The annual depreciation of rails, and the cost of keeping up the track, including superstructure, has been made the subject of careful observation on the Philadelphia, Wilmington and Baltimore Railroad, for the purpose of establishing the law, or degree, of their annual depreciation, and, consequently, the amount necessary to be appropriated each year for their maintenance.

Within the past 8 years the iron on this road has been entirely re-laid. With a view of ascertaining its present condition, every bar, during the past year, has been carefully examined by an experienced inspector. The President, in his report, states that the rails manufactured in England, in the early days of railroads, were the best ever manufactured. But as the demand increased on this side, our people were more anxious to get their orders filled than careful about quality. The English manufacturer, taking advantage of our eagerness, and, perhaps, of our mode of payment, sent us iron made from cinder-beds, and from refuse of their manufacturing establishments—much of it not worth the laying down.

Of the iron now on this road, 4,500 tons, manufactured by Bailey Brothers, in 1851-2, turned out to be of superior quality. A careful inspection of this iron, as it now remains on the track, together with an account of the number of bars that have been taken out, shows an annual deterioration of 8 63-100 per cent.—showing a duration of 11 58-100 years. The rails supplied by the Montour company, early in 1851, 1,000 tons, has proved of a very superior quality, exhibiting a durability of 12 65-100 years. That furnished by the same company in 1852, 1,500 tons, proved not to be so good, and exhibits a probable durability of 9 8-10 years. A lot furnished to this road by Reeves, Abbott & Co., from the Safe Harbor Works, shows a durability of 9 8-10 years. A lot of English iron, purchased of Losh, Wilson & Bell, of New Castle, proved to be the poorest laid on the road, having an average durability of only 4 1-10 years. There are many causes beside the quality of the iron that affect its durability. Iron on a dry and well-ballasted road-bed, with adequate drainage, and with good ties and joint fastenings, and always kept in adjustment, will show a durability twice as great as when laid on a road-bed of common earth, or clay, without the proper drainage, or ties or fastenings.

The Philadelphia, Wilmington and Baltimore Railroad now use American iron exclusively, either from the Montour Mills, or from Reeves, Buck & Co., and weighing only 50 lbs. to the yard. Light rails require a more perfect drainage, better joint fastenings, and about 25 per cent. more of ties. With these conditions, the President, in his report, expresses the opinion that the rails will prove as durable as those weighing 65 lbs. to the yard. He estimates the durability of rails, based upon the experience of his road, at 10 years. This will require for this road, 100 miles long, 800 tons of new rails annually, which can be had in an exchange for the old at \$20 per ton. The average life of a cross-tie is estimated at 7 years. The number annually required on this road, with the light rail, is 35,000, costing 27½ cents each. The cost of re-laying is estimated at \$400 per mile. The fastening spikes, castings, and switches, at \$600 per

mile. The total amount of all these items is \$36,450. The cost of labor in adjusting, ditching, inspecting track, is estimated at \$250 per mile for the whole road, making a total annual expenditure for the perpetual maintenance of track in a high state of efficiency, \$61,420, equal to \$614 50 per mile, annually.

Of course the degree of wear of track on any road must depend upon the number and weight of trains. The average number of miles run by the trains on the Philadelphia, Wilmington and Baltimore Railroad, is 425,000. The cost, per mile, consequently, for maintenance of road-bed and superstructure, would be 14.45 cents per mile run.

#### Changes on the New York & Erie Railroad.

The daily papers are filled with rumors of changes on the New York and Erie Railroad. Mr. Sloan of the Hudson River, and Mr. Campbell of the Harlem have been named in connection with the presidency of the Erie. Whether these are anything more than rumors we are unable to say. We presume the names of Mr. Sloan and Mr. Campbell have been used without any authority from these gentlemen. We do not suppose it probable that any important changes will take place on the Erie till the annual election of directors, which comes off about two months hence. At that time we presume radical changes will be made.

#### Keokuk, Mt. Pleasant and Muscatine R. R.

The report of this company under date of June 1, 1859, gives the following statement of the receipts and disbursements of this road to that date:

##### RECEIPTS.

From capital stock:	
Keokuk City bonds .....	\$100,000 00
Lee County bonds .....	150,000 00
Mt. Pleasant City bonds .....	50,000 00
Henry County bonds .....	100,000 00
Louisia County bonds (to be issued) .....	50,000 00
West Point Town bonds .....	10,000 00
Individual subscription .....	88,216 39
Bills payable, (due 1867) .....	6,000 00
Bills payable .....	300 00
Mortgage bonds .....	414,000 00
Amounts to the credit of sundry persons, being claims for settlement on final account .....	18,289 08
Transferable and preliminary certif's. .....	1,572 70
Stock due contractors on estimates .....	15,104 00
Domestic bonds .....	3,000 00
Income account .....	16,186 30

\$1,022,668 47

##### DISBURSEMENTS.

Construction account, which includes engineering, superstructure, grading, bridging, rolling stock, discount on bonds, &c .....	\$741,703 18
Salaries of officers .....	4,000 00
Real estate .....	16,730 00
Right of way .....	14,906 16
Balance on hand .....	245,329 13

\$1,022,608 47

The balance of \$245,329 13 consists of:	
Bills receivable .....	\$400 10
Amounts to debt of sundry persons, bonds on hand and to be issued .....	219,482 57
Subscriptions in arrears .....	25,446 46

\$245,329 13

The road is under contract to be completed to Mt. Pleasant by Dec. 1860, and to Columbus at the point of junction with Muscatine and Oskaloosa Railroad, by 1862.

The directors are Ralph P. Lowe, William Pat-

tersen, Charles Parsons, D. W. Kilbourne, Smith Hamill, J. M. Shelly, Keokuk; C. N. McDowell, John B. Lash, Robert Wilson, Laurin Dewey, Mt. Pleasant; Francis Springer, Columbus City.

## OFFICERS.

LAURIN DEWEY, *President*; JOHN W. OGDEN, *Secretary and Treasurer*; GUY WELLS, *Engineer*.

## Tredegar Iron Works.

We invite attention to the advertisement of Messrs. J. R. ANDERSON & Co., in another column. Since the destruction of their spike and bolt factory in April last, they have erected on the spot a large and well-adapted new brick building supplied with the most modern and improved machinery and to such effect that they can turn out twenty-five tons of spikes and five tons of bolts per day.

Although the spike and bolt manufacture form now, under these vast improvements, an important branch in the Tredegar Iron Works, still this progressive Company are at all times ready to fill in the best style possible, all orders for bar iron of all sizes, railway chairs and spikes, switches, frogs, pumps, bridge bolts, etc., freight cars, with iron or wooden truck, iron and brass castings, of all descriptions, wheels and axles, separate or fitted, locomotives, stationary and portable engines, of any desired power, saw mills, grist mills and sugar mills, cannon of all calibres, iron or brass; also, shot and shells, and every other description of iron work.

The Tredegar Works, well-known all over the Union, give work to more employees than any other establishment in Richmond. The Tredegar Iron Works Company, consists of Messrs. Joseph R. Anderson, John F. Tanner, R. Archer, and R. S. Archer.

## Interest and Dividends.

The interest on the First Mortgage Bonds of the Cincinnati, Hamilton and Dayton railroad, now due, will be paid at the office of the Company, at the Sixth-street Depot, or at the Lafayette Bank.

The interest coupons on the 2d Mortgage Bonds of 1861 and Dover extension Bonds of the Harlem road will be paid at the office, corner of Twenty-sixth street.

The Connecticut River Railroad has declared a dividend of 4 per cent. on the preferred and 2½ per cent. on the common stock, payable 1st of August next to holders of record July 20th.

The South Shore Railroad (Lake Erie) has declared a semi-annual dividend of 5 per cent.

The interest coupons on the first mortgage bonds of the Central Railroad of New Jersey, due on the 1st of August, will be paid at the office of the company on that day.

The interest coupons due August 1st, on all classes of bonds of the Michigan Southern and Northern Indiana Railroad Companies, and on the bonds of the Detroit, Monroe and Toledo Railroad Company, will be paid on that day at the Corn Exchange Bank.

## Cocheco Railroad.

The following gentlemen were elected directors of this road for the current year, at a meeting of the stockholders held at Alton, N. H.: William Hill of North Berwick, President, William Hale, Joseph H. Smith, George Mathewson, Charles W. Woodman of Dover, George M. Herring of Farmington, and John McDuffee of Rochester,

## Brooklyn and Jamaica Railroad.

The general account of the company is as follows:

## GENERAL STATEMENT.

The capital stock of the Brooklyn and Jamaica Railroad consists of 6,000 shares at par value of \$50 per share, equal to.....	\$300,000 00
The company own 303 shares, leaving outstanding 5,697 shares, equal to.....	284,850 00
The total debt of the company amounts to.....	85,000 00
(Represented by 85 bonds of \$1,000 each, bearing interest at 7 per cent. semi-annually, payable on the 1st day of June, 1870).	
The company holds 71 bonds of \$1,000 each, of the Long Island Railroad Company, bearing interest at 6 per cent. semi-annually, payable 1st January, 1870.....	71,000 00

## ANNUAL STATEMENT.

Total rent to be received this year.....	\$33,300 00
Interest on the \$71,000 Long Island Railroad bonds, 6 per cent.....	4,260 00
	37,560 00
Interest to be paid on Brooklyn and Jamaica Railroad bonds, \$85,000 at 7 per cent.....	\$5,950 00
Dividend of 9 per cent. on capital stock, \$284,850..	25,636 50
Expenses, say.....	750 00
	32,336 50
Surplus.....	\$5,223 50

## Ohio Central Railroad.

This road is now in the hands of a receiver, which practically winds it up as far as the stock and bondholders are concerned. If it pays expenses and salaries, and keeps itself in repair, this is all that can be expected from it.

The first report of the receiver gives the following result:

RECEIPTS.	
Balance on hand May 1st.....	\$2,813 99
Receipts prior to May 1st.....	28,305 68
Do. since May 1st—Passengers.....	12,040 03
Do. do. Freight.....	9,015 82
Do. do. Express.....	473 20
Total receipts.....	\$52,648 72
EXPENDITURES.	
Road department.....	\$1,781 76
Transportation department.....	3,303 19
Material for shops.....	3,676 69
Wood.....	2,308 58
Balances due connecting roads.....	7,061 48
Taxes.....	1,000 00
Legal expenses.....	48 06
Pay roll.....	24,050 00
	\$43,229 00

—showing a balance of \$9,419.

The uncollected revenues for May are as follows:—

Due from other roads on freight acc't ..	\$5,069 05
Do. station agents on do. ..	8,373 82
Do. other roads on passenger acc't ..	4,016 46
Do. station agents on do. ..	2,353 99
Do. conductors on do. ..	182 56
Do. other roads on do. ..	
estimated.....	2,639 76
Do. express earnings.....	58 39
Do. one month mail transportation ..	2,297 91
Total.....	\$24,991 94

## INVENTORY OF PROPERTY.

The receiver's inventory of property and assets of the road includes a detailed statement of

length of track, stations, dwellings, lands, workshops, tools, etc., together with the following recapitulation of the road stock:

Number of locomotives.....	40
Do. passenger cars.....	28
Do. baggage do.....	11
Do. freight do.....	469

Of the engines, 13 are coal burners and 27 wood; 11 are denominated first class freight; 18 second; 2 third, and 9 first class passenger. Of the total number, 23 are reported in good running order; 13 need repairs, and 4 need re-building. Of the passenger cars, 12 are reported in good order, 8 in fair order, 2 being re-painted, and 6 need re-building.

## Wabash Valley Railroad.

Subjoined will be found a circular just issued by this company. We take it that Mr. Boody acts upon the idea that the owners of the road being the bondholders, can better forego their interest for a few months than raise money by extravagant rates of interest to pay themselves.

OFFICE TOLEDO & WABASH RAILWAY Co.,  
No. 54 Exchange Place,  
New York, July 27, 1859.

The semi-annual interest on the First Mortgage Bonds of this Company, accruing on the 1st proximo, will not be paid on maturity, the company asking a temporary indulgence therefor for a period of three or four months. The annexed exhibit indicates the gross earnings of the road during the twelve months ending June 30, viz:—

July.....	\$75,866 48	Jan'y.....	\$39,052 10
August.....	112,341 87	Feb'y.....	39,750 88
September.....	103,491 14	March.....	61,724 34
October.....	96,063 57	April.....	68,918 26
November.....	63,517 39	May.....	60,068 24
December.....	41,503 46	June.....	58,481 23

Total.....	\$820,778 96
Actual operating expenses for the same period.....	406,250 56

Balance.....\$414,528 40

One year's interest on the entire bonds of the company is, to wit:

First mortgage, \$3,400,000..	\$238,000
Second do. 2,500,000..	175,000
	413,000 00

Balance.....\$1,528 40

From the foregoing statement it appears that notwithstanding the pervading stagnation of business and stringency of money affairs at the West, coupled with three successive seasons of short crops, the revenues derived from the road have proved amply sufficient to defray all operating expenses, and also to meet the entire interest on the bonded indebtedness of the company. It may, therefore, be regarded as demonstrated that a degree of material and financial strength and capacity inheres in the road, sufficient not only to prove it to be self-sustaining, but rewarding and remunerative to its owners, and that too under the usual disadvantages above mentioned.

The present inability of the company to promptly meet the August dividend of interest arises from the necessity of employing the means usually applicable thereto to other and indispensable objects. During the past year it was found essential to the successful operation of the road to increase its equipment of power and rolling machinery. Accordingly locomotives and cars were purchased to the extent of \$115,000; within the same period expenditures of some \$45,000 were made in graveling and fencing the road, and building grain warehouses, and superadded thereto were expenses of \$25,000 incident to carrying to successful consummation the recent compromise arrangement entered into between the various classes of creditors of the company. The extraordinary damages sustained by reason of the great freshet of last



season, by which the company lost one of its largest bridges, besides numerous culverts and other extensive structures, required an outlay of \$40,000 to restore the road to its original usefulness. These large expenditures, not likely to occur again, aggregating \$225,000, were made directly from the monthly earnings of the road, and indicate the occasion of the temporary indulgence now sought of the first bondholders.

The present and future prospects of the road were never more hopeful and encouraging. A very large crop of wheat, of unusually excellent quality, has been recently harvested throughout the Wabash Valley, and the yield of corn promises to be very abundant. Other elements of advantage and prosperity will soon be secured by the completion and opening of two important lines of tributary railways. The Logansport, Peoria and Burlington Railroad is in a forward state, the iron and superstructure is now being laid, and it is expected that it will be ready for the passage of trains early in November next. The completion of this great trunk line gives the shortest and most practicable route from Burlington and Central Iowa to all eastern States, and will draw a vast traffic upon the road of this company from one of the most extensive and richest sections of country in the West. During the present season, the Quincy and Palmyra Railroad will be in successful operation, thus filling up the only remaining link of rail communication to St. Joseph, Missouri. The completion of these great works, combined with the large incoming crops, and unmistakable indications of a general revival of business at the West, furnish substantial grounds for confidence in the future success of the road, and the belief that the interest now deferred will be promptly met at the date heretofore named. Those parties holding coupons maturing on the first prox. will be allowed interest for the period thereafter held.

A. BOODY, President.

#### Verdict of the Jury on the Michigan Southern Railroad Disaster.

We find in the South Bend Register a portion of the verdict of the Jury empanelled in the Michigan Southern Railroad disaster case at Mishawakie. After detailing the particulars of the case, the Jury say:

"That they are of the opinion that the embankment and culvert at the place were well and substantially built, but the culvert was not of sufficient size and capacity to carry off the water safely in time of a flood, and liable to be obstructed by drift wood, rails, trees, &c. That said culvert was 4½ feet wide, and 6½ feet high, and should have been as large again.

"The Jury further, upon their oaths, say that the foreman, Dennis Kane, was guilty of wilful neglect of duty in not examining the track on and over the embankment, after the storm on the night before the time for the arrival of the train, in accordance with the instructions and regulations of the managers of the road."

The Jury was composed of the most eminent citizens of that locality, and they devoted five days to a careful investigation of all the circumstances in the case.

#### Maryland and Delaware Railroad.

It is stated that a conditional contract has been entered into with a responsible party for the completion of this road, and that the probabilities are favorable to an early resumption of the work.—Del. Gazette.

#### South Side Railroad.

The earnings on the South Side Railroad for the nine months ending July 1st, 1859, amounted to \$285,163 69, a gain of 12 per cent., or \$30,723 01, over the receipts of the preceding year.

#### Chicago, St. Paul and Fond du Lac Railroad.

On the 6th, at Washington, two hundred and eleven thousand acres of land were certified to the State of Wisconsin for the Chicago, St. Paul and Fond du Lac Railroad, under the act of Congress of 1856.

#### Railroad Iron.

THE undersigned have American and Foreign Railroad Iron for sale, deliverable in New York and other markets.

CASWELL & PERKINS,  
Brokers, 69 Wall st.

New York, July 9, 1859.

#### Car Wheel Boring Machine FOR \$400.

ONE of Wheeler's best vertical Machines, with over-head pulleys and shaftings,—cost \$700. Has been used a short time and is in perfect order, ready for use.

Im27 WILLIAMS & PAGE,  
44 Water st., Boston.

#### FREIGHT CARS for SALE.

11 CARS—Have been run about one year,—viz:—  
2 long 8-wheel Box Cars,  
9 " " Platform Cars.

These Cars are made in the best manner, with large axles, brakes, Lightner boxes, etc., and will be sold low for cash.  
WILLIAMS & PAGE,  
44 Water st., Boston.

#### RAILROAD IRON.

500 TONS American Rails, Erie pattern, 56 lbs. per yard, for sale at Chicago, also about  
250 Tons English Rails same size and weight.

M. K. JESUP & COM'Y,  
New York, June, 1859. 44 Exchange Place.

#### RAILROAD IRON.

WELSH or Staffordshire make, delivered on board at an English port or at a port in the United States.

NORRIS & BROTHER,  
BALTIMORE,  
And 17 Nassau st., New York.

#### RAILROAD IRON.

THE undersigned, agents for the manufacturers, are prepared to make CONTRACTS FOR RAILS delivered free on board at ports in England, or exship at ports in the United States.

M. K. JESUP & COM'Y,  
44 Exchange Place.

New York, 1st June, 1859.

#### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver, free on board at shipping ports in England, or at ports of discharge in the United States, RAILS OF SUPERIOR QUALITY, and of weight or pattern as may be required.

VOSE, LIVINGSTON & CO.,  
9 South William st.

NEW YORK, Aug. 1, 1858.

#### RAILROAD IRON.

THE RENSSELAER IRON COMPANY,  
TROY, N. Y.,

OFFER Rails of their own manufacture deliverable as may be desired by purchasers.

#### OLD RAILS

received in exchange for new, or for re-manufacturing.  
JOHN A. GRISWOLD, Agent,  
TROY, N. Y.

New York Agency:

BUSSING, CROCKER & DODGE,  
32 Cliff St.

#### RAILROAD IRON.

The Crescent Manufacturing Company,  
WHEELING, VA.,

ARE now prepared to execute, at short notice, orders for Rails of any required pattern and weight, and to re-roll old rails, on the most liberal terms.  
Address  
N. WILKINSON, Sec'y,  
Wheeling, Va.

#### RAILROAD IRON.

THE undersigned, Agents for leading Manufacturers in STAFFORDSHIRE and WALES, are prepared to contract for delivery on board ship at LIVERPOOL, or WELSH port.

C. CONGREVE & SON,  
13 Cliff st., N. Y.

#### RAILROAD IRON.

WOOD, MORRELL & CO.,

HAVING leased the extensive Works of the CAMBRIA IRON COMPANY, situated at JOHNSTOWN, Cambria Co., Penna., and purchased all their real estate, are now prepared to execute, at short notice, orders for RAILS of any required pattern or weight, on the most liberal terms.

PHILADELPHIA (North Penna.) R. R. BUILDING,  
OFFICE, No. 407 Walnut st.

#### RAILROAD IRON.

THE subscriber is prepared to enter into CONTRACTS FOR RAILS delivered at an English port or at a port in the United States.

JAMES TINKER,

54 Exchange Place,  
NEW YORK.

Erie Rails, 57 to 58 lbs. per yard, on hand in NEW YORK and NEW ORLEANS.

#### LACKAWANNA IRON AND COAL COMPANY, SCRANTON, LUZERNE CO., PA.

BY the completion of the DELAWARE, LACKAWANNA AND WESTERN RAILROAD, this Company are enabled to obtain the MAGNETIC ORES from the most celebrated mines in New Jersey, which used in combination with their native ores, produce a quality of iron not surpassed.

These Works have been greatly enlarged the past year, and are, therefore, prepared to execute orders promptly for RAILROAD IRON of any pattern and weight, Car Axles, Spikes, and Merchant Iron. They have on hand patterns for T Rails, of the following weights per lineal yard, viz—25, 30, 36, 40, 45, 50, 60, 63, and 75 lbs. Samples of RAILS and MERCHANT IRON may be seen at the office of the Company, 46 Exchange Place, N. Y.

Address J. H. SCRANTON, President,  
Scranton, Pa.  
or DAVID S. DODGE, Treasurer,  
46 Exchange Place,  
NEW YORK.

#### RAILROAD IRON.

THE undersigned, having been appointed Agents for Messrs. BOLCKOW & VAUGHAN, proprietors of the

ESTON, MIDDLESBRO', and WITTON PARK IRON WORKS, YORKSHIRE, ENG., are prepared to contract for the sale of RAILROAD IRON of a superior quality and on the most advantageous terms.

MEAD & BELL,  
17 William st., N. Y.

#### CAST STEEL,

Of First Quality and Warranted.

BAR, TOOL, DRILL, AND DIE STEEL.  
LOCOMOTIVE, CAR AND CARRIAGE CAST STEEL.  
CAR SPRING STEEL.  
Far superior to the ordinary kind.

#### FROG PLATES, POINTS.

Saw, File, Cutlery, Rake, Hoe, Axe and Plough Steel. Gun Metal. Wire and Machinery Steel.  
ORDERS FILLED PROMPTLY AND AT LOW PRICES.

SALTUS & CO.,  
45 Cliff st., New York.

#### THE RAILROAD IRON MILL COMPANY, CLEVELAND, OHIO, MANUFACTURERS EXCLUSIVELY OF RAILROAD IRON.

THIS is a new ROLLING MILL, having been working only eighteen months, and confined to work for roads on this line between Buffalo and Chicago in re-rolling old Rails. The capacity is Forty Tons per day. It is well situated for receiving old Rails, either by Railroad or Lake.

#### Orders are now solicited

From Roads in other sections of the country; and work will be made with New Iron in the heads, if desired.  
Apply to

ALBERT G. SMITH,  
President of the Incorporation.

February, 1858.

#### MORRIS & JONES & CO., IRON MERCHANTS, MARKET AND SIXTEENTH STREETS, PHILADELPHIA.

IRON AND STEEL IN ALL THEIR VARIETIES.

BOILER PLATE, CAR AXLES,  
BOILER RIVETS, RAILROAD IRON,  
CUT NAILS and SPIKES, PIG IRON, etc.

Having the selling agency of a number of the Rolling Mills, Furnaces and Forges in this State, orders for any description of IRON can be executed.  
August 16, 1854.

**BEERS' CAST IRON ENDLESS RAIL, FOR CITY RAILROAD.**

Patented August 24, 1858, and May 10, 1859.



THIS Road is constructed exclusively of **Iron**, without tie, string-piece or spike (in paved streets), will wear as long as three successive structures of the Philadelphia class of road; thereby saving not less than \$1,000, yearly, per mile on repairs and relays, now fully tested. Cost from \$6,000 to \$8,000 per mile.

**BEERS' "ELASTIC IRON RAILWAY," FOR LOCOMOTIVE USE.**  
This structure is strictly independent of the action of frost, indestructible in the character of material, and positively free from undulations; saving 50 per cent. on dead weight of train, 60 per cent. on motive power, and 80 per cent. on repairs; thereby reducing the current expenses of maintaining and operating from \$1,500 to \$2,000 per mile yearly. Cost of track (exclusive of grading) from \$9,000 to \$11,000; out of which \$2,000 will be saved on the first cost of equipment, and character of grading. The undersigned is prepared to construct either Road, in any part of the United States, South America, or Europe; or will furnish the materials only, for any part of the world. For particulars address

S. A. BEERS, C. E., Brooklyn, N. Y.

A specimen of these Roads may be examined at 55 Liberty st., NEW YORK.

**THE FARNLEY IRON CO.,**

Near LEEDS, Yorkshire,

MANUFACTURERS OF  
LOCOMOTIVE TIRES,  
TIRE BARS,  
BOILER PLATES, ETC.

The undersigned are prepared to execute orders for

**TIRES,**

Manufactured at these celebrated Works,  
OF ALL SIZES.

A STOCK CONSTANTLY ON HAND.

The quality of the **FARNLEY IRON** is precisely the same as that of **LOW MOOR** and **BOWLING**, being from the same bed of mineral.

For sale, at manufacturer's prices, by

M. K. JESUP &amp; CO.,

44 Exchange Place, New York,

SOLE AGENTS for the UNITED STATES and CANADAS.

JOS. R. ANDERSON,  
JOHN F. TANNER,  
R. ARCHER,  
R. S. ARCHER.

**TREDEGAR IRON WORKS,**  
**RICHMOND, VA.**WE CONTINUE TO MANUFACTURE at these old and extensive Works, from **BEST CHARCOAL****METAL—**

BAR-IRON OF EVERY SIZE AND SHAPE,  
RAILROAD CHAIRS, VARIOUS PATTERNS,  
RAILROAD AND SHIP SPIKES,  
TRUCK BOLTS AND FISH BARS,  
CAR AND TRUCK AXLES,  
BRIDGE AND OTHER LONG BOLTS,  
IRON TRUCKS,  
BOX AND PLATFORM CARS.

RAILROAD WHEELS, EITHER FITTED TO AXLES  
OR SEPARATE.  
CANNON AND PROJECTILES, ALL KINDS.  
IRON AND BRASS CASTINGS,  
LOCOMOTIVE, STATIONARY AND PORTABLE  
ENGINES,  
SAW AND GRIST MILLS,  
SUGAR MILLS AND ENGINES.

Our **SPIKE AND BOLT FACTORY**, which was destroyed by fire on the 27th April, has been rebuilt on an enlarged scale, and we are now prepared to make 25 tons **SPIKES** and 5,000 **BOLTS** per day. Our Customers may now send us their orders with full confidence that they will be always promptly executed.

J. R. ANDERSON &amp; CO.

SANDERSON, BROTHERS &amp; CO.,

MANUFACTURERS OF THE

**CELEBRATED CAST STEEL,**

FOR MAKING SUPERIOR TOOLS.

**SHEFFIELD, ENGLAND.**

IMPORTERS OF FILES,

**Armitage's Genuine Mousehole Anvils, etc.**

16 CLIFF STREET, NEW YORK.

49 BATTERYMARCH ST., Boston.  
24 BANK PLACE, New Orleans.516 COMMERCE ST., Philadelphia.  
TYLER, DAVIDSON & CO., Cincinnati, O.  
HISS & COLE, Baltimore, Md.**RAILROAD IRON.**

CONTRACTS for **RAILS**, at a fixed price or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned.

**THEODORE DERON,**10 Wall st., near Broadway, N. Y.  
500 tons T Rails on hand, 34 to 57 lbs. per lineal yard.**RAILROAD IRON.**

THE subscribers, Agents for the Manufacturers, are prepared to contract for the delivery of **RAILROAD IRON** at any port in the United States or Canada, or at a shipping port in Wales.

**WAINWRIGHT & TAPPAN,**

Boston, June, 1851. 29 Central Wharf.

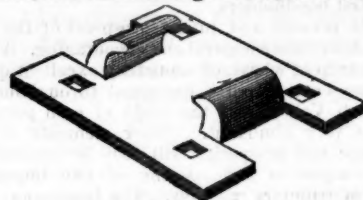
**NEW YORK RAILROAD CHAIR WORKS.**

J. B. GREEN &amp; CO., Proprietors.

SUCCESSORS TO THE

New York Wrought Iron Railroad Chair Company.

Office, No. 51 Exchange Place, New York.



HAVING recently purchased, at Receiver's Sale, all the Patent Rights owned by the late "NEW YORK WROUGHT IRON RAILROAD CHAIR COMPANY," and also the entire machinery for manufacturing their improved **Wrought Iron Railroad Chair**, we are now fully prepared to receive and fill all orders from responsible parties, to any extent, with promptness and dispatch.

The thickness of the lips of our chair increases through the bend, where the greatest strength is required, and diminishes towards the edge; so that a less weight of metal may be used, and a strength acquired equal, if not superior, to that of a heavier Chair of uniform thickness.

We invite the attention of parties wishing the best **Wrought Iron Chair** now in market, to our works for a supply; believing they combine qualities superior to any others now manufactured.

One great advantage possessed by our Chairs over those that are rolled, is that the lips are turned AGAINST or ACROSS the fibre of the iron; while the lips of a rolled Chair are turned WITH the fibre—making them liable to break or split as a board.

The Chairs weigh from seven and a-half to fifteen pounds, according to the thickness of the iron and size of the Chair. To enable us to give you a perfect fit, it will be necessary always to send a section of the Rail properly notched. We cannot undertake to make Chairs without a proper pattern, as it is impossible to make a perfect fitting Chair from a drawing.

Chairs of our manufacture, are used by the following roads, and by over seventy others, in every part of the country:—

North Carolina Railroad Company,  
New Jersey Central Railroad Company,  
Panama Railroad Company,  
Buffalo and State Line Railroad Company,  
New York and New Haven Railroad Company,  
New Orleans, Jackson and Great Northern R.R. Co., etc., etc.

Messrs. **M. K. JESUP & CO.**, 44 Exchange Place, NEW YORK, are the only parties authorized to act as our Agents.

Mr. JACOB ROWE, formerly President of the old Company, has no connection, whatever, with our present organization, nor does he sell chairs of our make.

**IRON BOILER FLUES.****LAP-WELDED BOILER FLUES,**

1½ to 7 inches outside diameter, cut to definite length, 2 to 20 feet as required.

**Wrought Iron Welded Tubes,**

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

MANUFACTURED AND FOR SALE BY

**MORRIS, TASKER & CO.,**  
**PASCAL IRON WORKS.**

Established 1821.

WAREHOUSE—209 SOUTH THIRD STREET,  
PHILADELPHIA.STEPHEN MORRIS,  
THOS. T. TASKER, JR.CHAS. WHEELER, JR.,  
STEPHEN P. M. TASKER.

THE

**ROUND OAK IRON WORKS,**  
**STAFFORDSHIRE, ENGLAND.**

Lord WARD, Proprietor.

MANUFACTURE **RAILS, BOILER PLATES, SHEETS, HOOPS and BARS**, of every variety of pattern.

**NORRIS & BROTHER,**Agents for the United States,  
12 SOUTH CHARLES STREET,  
BALTIMORE.

Gmss

And 17 NASSAU STREET, NEW YORK.

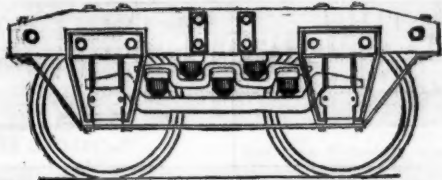
**RAILROAD IRON AND COMMON BARS.**

THE undersigned, sole Agents to Messrs. GUEST & Co., the proprietors of the Dowlais Iron Works, near Cardiff, South Wales, are duly authorized to contract for the sale of their G. L. Railroad Iron, and Common Bars, on most advantageous terms.

**R. & J. MAKIN, 70 Broad st.**



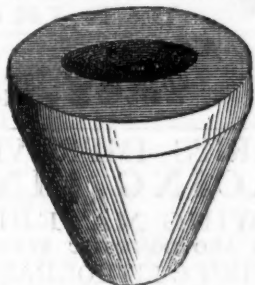
# NEW YORK METALLIC CAR SPRING COMPANY,



SOLE MANUFACTURERS OF THE  
**CONICAL VOLUTE STEEL CAR SPRING,**  
OFFICE, 54 WILLIAM ST, NEW YORK.

C. PALMER, CHAS. D. GIBSON, RICHARD VOSE,  
Pres't. Treas'r. Sec'y.

ELASTIC CONE SPRING CO.,  
OFFICES: 30 Exchange Place, New York,  
and Jersey City, New Jersey.



MANUFACTURERS of the **PATENT ELASTIC CONE SPRINGS** for Railway Cars. This Spring is new, and simple in its construction, and possesses superior advantages. It is manufactured from the best quality of India Rubber prepared under the JOSTIN Patent, and is less expensive, and at the same time affords more ease, than other shaped springs. It can be fitted to all descriptions of cars without alteration or expense.

**JAMES JEFFRIES & SONS,**  
MANUFACTURERS OF  
LOCOMOTIVE, CAR AND TANK  
**SPRINGS,**  
PHILADELPHIA, (rear of Girard House.)

## REFERENCES.

M. W. BALDWIN & CO., R. NORRIS & SON, A. WHITNEY & SONS, Philadelphia, JOS. R. ANDERSON, Richmond; SMITH & PERKINS, Alexandria, Va.; JNO. EDGAR THOMSON, of Penn. R. R.; EDWARD C. DALE, of P. G. & N. R. R.; S. RUTH, of Rich. F. & P. R. R.; THOS. DODAMEAD, of Va. Central; URIAH WELLS, Petersburg, H. D. BIRD, South Side R. R., Petersburg; C. O. SANFORD, of Petersburg R. R.; JNO. R. McDANIEL, of Va. & Tenn. R. R.; JAS. P. ROBERTSON, of Wilmington and M. R. R.; HENRY T. PEAKE, of S. C. R. R.; S. S. SOLOMONS, of North East R. R.; JOHN FLYNN, of Western & Atlantic R. R.; E. F. ROWARTH, of Greenville & Col. R. R.; GEO. YONGE, of Georgia R. R.; WM. CLARK, of Muscogee R. R.; W. W. BALDWIN, of Montgomery & W. P. R. R.; WM. M. WADLEY, of N. O. J. & G. N. R. R.; A. B. SEGER, of Opelousas R. R.; C. WILLIAMS, of Vicksburg; ALLEN S. SWEET, of Buffalo and Erie R. R.; F. C. ARMS, of Memphis; H. COFFIN, of Memphis; A. WHEEL, of Seaboard & R. R.; UNION CAR WORKS, Portsmouth; WM. M. HIGHT, of Augusta; S. & R. H. RIKERS, WHARTON & PATSCH, Charleston, and all Roads where our **SPRINGS** are in use.

Will be happy to furnish a **SET OF SPRINGS** to such companies as may wish to try their **Durability and Elasticity**, by writing us the Length, Width, Curve over all, and the weight which they are to bear.

## Patent Reversible Baggage Check.



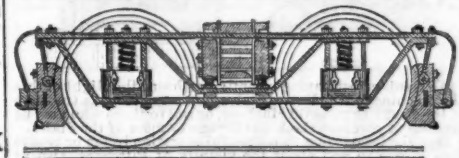
# STEEL CAR SPRINGS,

MANUFACTURED

BY THE

PATENTEE,  
**CARLOS FRENCH,**  
SEYMOUR, CONN.

THESE SPRINGS are now in use on many of the leading Railroads East, South and West.  
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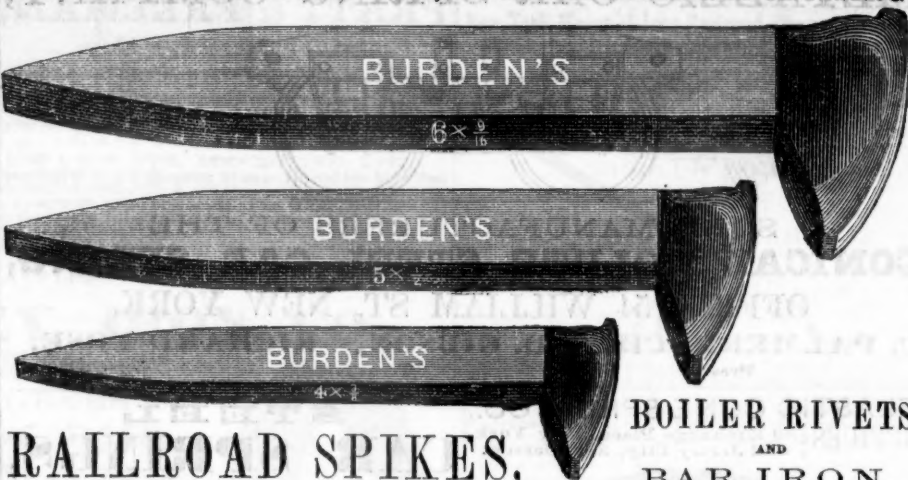
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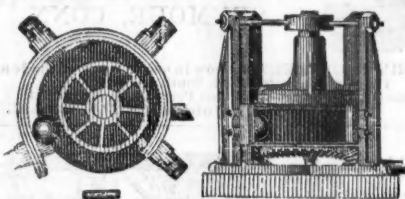
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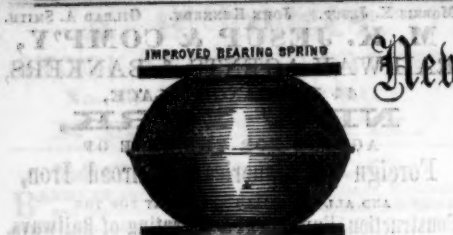
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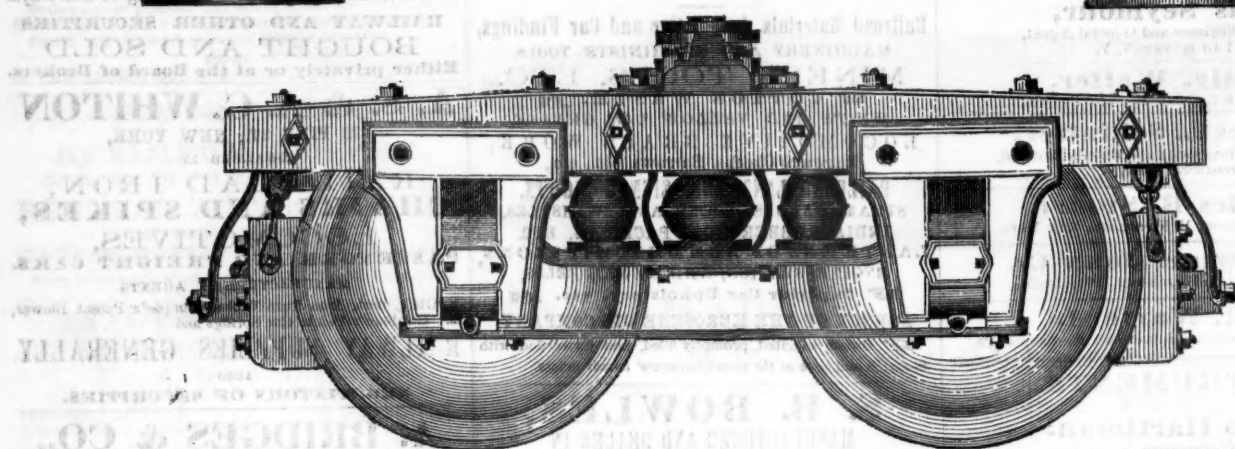
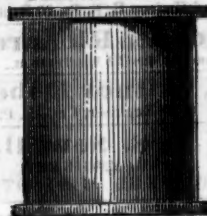


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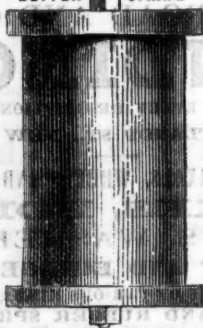
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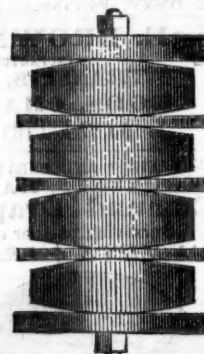


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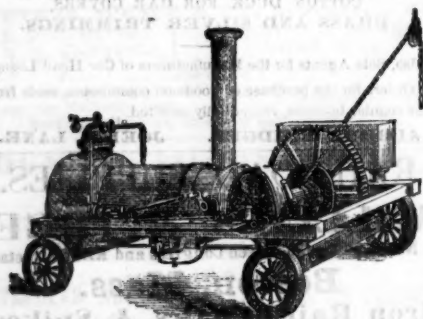
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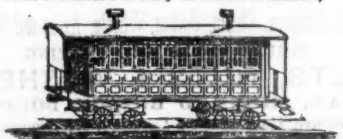
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